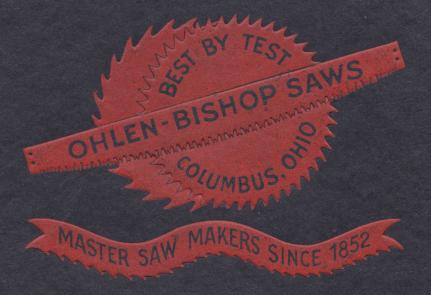
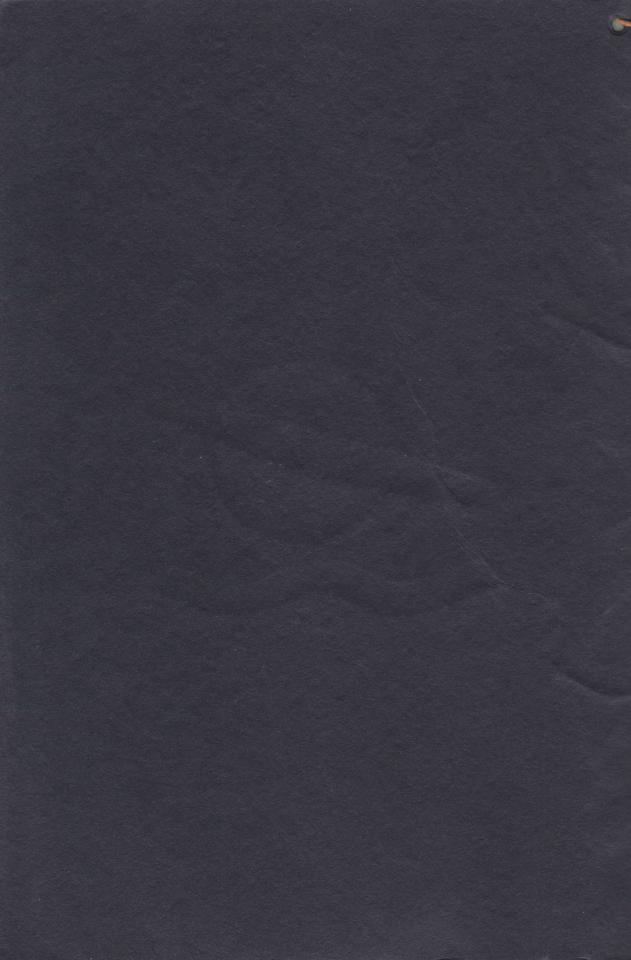
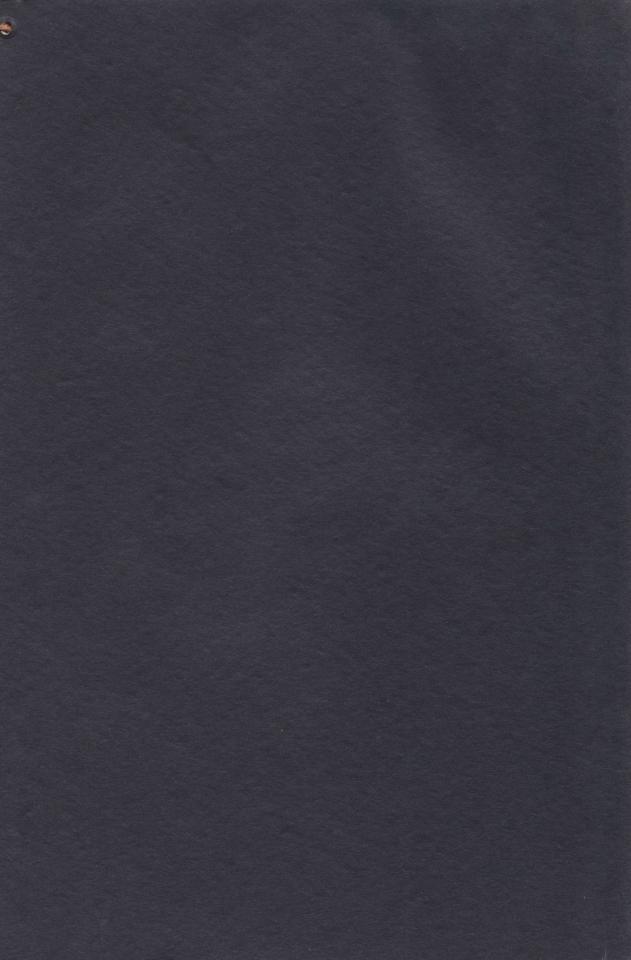
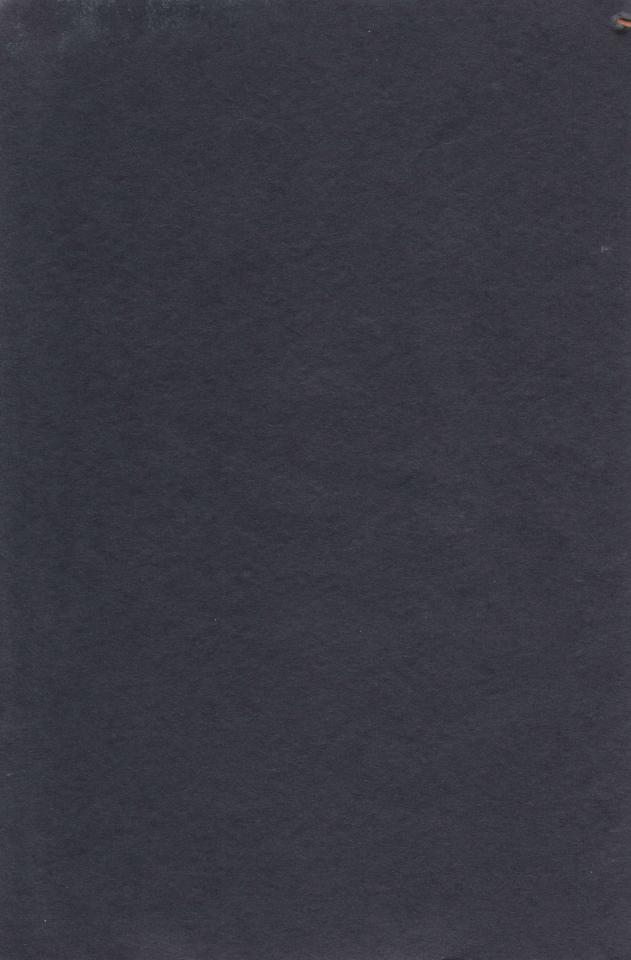
OHLEN-BISHOP



SAWS — FILES MACHINE KNIVES









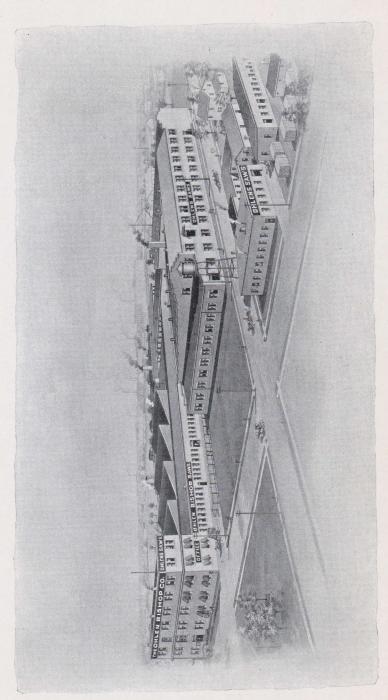
CHROME NICKEL ALLOY STEEL

WARRANTED UNEQUALED FOR FAST CUTTING, TOUGHNESS, UNIFORMITY AND EDGE-HOLDING QUALITY

Catalog No. 11

The Ohlen-Bishop Co.

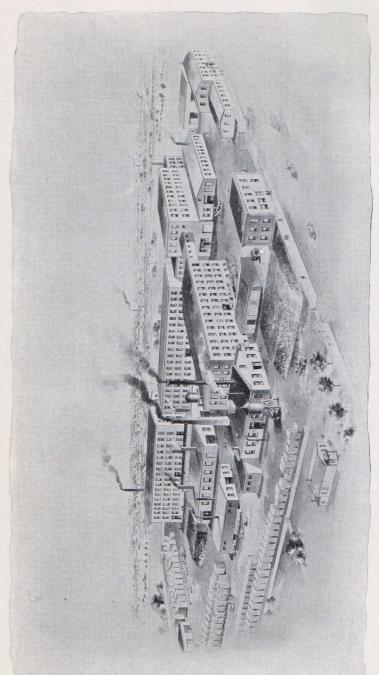
Columbus, Ohio, U.S.A.



Mill Saw Division, The Ohlen-Bishop Company, Columbus, Ohio.

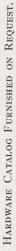


MASTER SAW MAKERS SINCE 1852



Hardware Division, The Ohlen-Bishop Company, Lawrenceburg, Indiana.

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In issuing this catalog it has been our aim to compile a reference book; replete with information pertaining to our line of Saws, Knives and Files. We have endeavored to describe and illustrate standard sizes only, and in doing so have removed all uncertainty and doubt as to which sizes and kinds have been most satisfactory to the majority of the trade.

We sell not only Saws, but Saw Service and Satisfaction and have, in this book, given to our customers the experience of Master Saw Makers to aid them in securing the greatest efficiency in sawing and planing good lumber. We invite attention to our simplified price list eliminating uncertainty and unnecessary work for customers.

Our constant aim is to continue improving our Products and maintain the reputation of—"STANDARD OF PER-FECTION." Although we appreciate the importance of attractive appearance as is evidenced by our Products, our main thought is of QUALITY. Because of this fact we have upheld an enviable reputation as Master Saw Makers for over seventy-five years and are maintaining this reputation by adopting new and up-to-date methods from time to time.

Sincerely,

THE OHLEN-BISHOP COMPANY

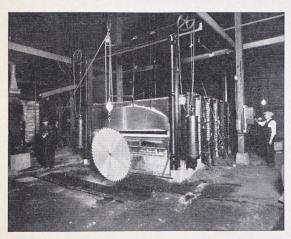


Seventy-Five Years of Fine Saw Making

Ohlen-Bishop Reputation For more than seventy-five years OHLEN-BISHOP SAWS for wood and metal cutting have been recognized as standard in the saw line. Made in the world's most modern Saw Plants they represent the last word in Under the most severe tests, and in competition OHLEN-BISHOP SAWS,

Saw Efficiency. Under the most severe tests, and in competition CKNIVES AND FILES have met every demand made upon them.

Ohlen-Bishop Steel It is fundamental, or should be, in the saw business that only first quality steels should form the base of the product. OHLEN-BISHOP SAWS



Hardening Furnace

are manufactured out of extra refined OHLEN CHROME NICKEL ALLOY and the equally famous GREY-HOUND REFINED STEELS, made after time-tested formulas prepared in our Engineering Department for our exclusive use. We know this to be the best steel made for saw purposes and take genuine pleasure in recommending it to Our furnaces and heatthe trade. treating apparatus, being electrically equipped and controlled, assure both uniformity and accuracy. From more than seventy-five years' experience in the Saw business we maintain that OHLEN CHROME NICKEL ALLOY and GREYHOUND REFINED STEELS have no superior in point of temper, tensioning quality or toughness.

Ohlen-Bishop Workmen

Workmen

OHLEN-BISHOP SAWS are the product of Master Saw Makers. In every department of the OHLEN-BISHOP Plants may be found a corps of experts who have spent the greater part of their lives in the saw industry. These master workmen were selected because of their ability to meet the most exacting requirements of discriminating Saw users. Rule One of the OHLEN-BISHOP shop code is that QUALITY, not QUANTITY, must govern the out-put.

Ohlen-Bishop Equipment

The superiority of OHLEN-BISHOP SAWS, KNIVES and FILES is not dependent upon human skill alone, however, for every producing department is fully equipped with automatic machinery, electrical devices, and, in fact, every worth-while facility known to modern Saw Makers.

Ohlen-Bishop The OHLEN-BISHOP Mill line, manufactured at our Columbus, Ohio Mill Line Plant, includes:

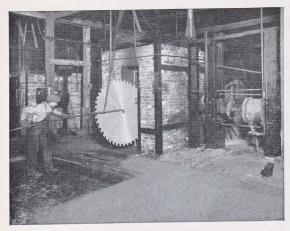
Solid Circular Saws
Inserted Tooth Circular Saws
Teeth for Inserted Tooth Saws
Shanks
Cross Cut Saws One and Two-man
Gang Saws

Ice Saws
Concave Saws
Edger Saws
Horn and Ivory Saws
Narrow Wood Band Saws
Wide Wood Band Saws





Drag Saws
Pit Saws
Mitre Saws
Novelty Saws
Ohlen-Burke Patent Groover or Dado head



Flattening and Tempering Furnace

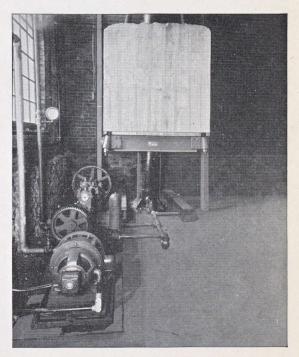
Ohlen-Bishop The OHLEN-BISHOP Hardware Line HARDWARE Line, made at our Lawrence-burg, Indiana Plant, includes:

Hand Saws
Compass Saws
Kitchen Saws
Back and Stair Saws
Butcher Saws
Wood Saws and Frames
Pruning Saws
Trowels
Scrapers
Corn Knives
Hedge Knives
Cane Knives

Making
Ohlen-Bishop
Quality Saws
Out in the heat treatment of Ohlen saws.

In this, as in every other phase of saw making, the individual skill of trained men must be supplemented with expenMachine Knives Hard Edge Metal Band Saws All Hard Metal Band Saws Hard Edge Hack Saws Power Hack Saws Files

Ohlen-Bishop Ohlen-Bishop Hand Saws Saws are supreme from every viewpoint and have proved the OHLEN-BISHOP claim to mastery of the art of saw making. No others compare with them in point of appearance, easy cutting, speed, durability or correctness of design. Manufactured out of the famous GREYHOUND REFINED STEEL their superiority is universally recognized. In open competition with the world's best known brands "BISHOP" and "GREYHOUND" Saws, Tools, Trowels and Scrapers have always taken the lead.



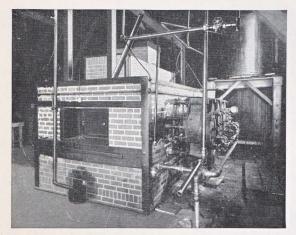
Pressure Accumulator



MASTER SAW MAKERS SINCE 1852

sive equipment, which only an organization with ample resources and operating on a large production basis could economically afford.

As every experienced saw filer knows, the cutting and edge holding qualities of a saw depend on its hardening and tempering as much as on the steel analysis. These processes must be accurately and uniformly controlled to an extent which can be only secured by close and precise knowledge of just what is taking place during each moment of the processing.



Flattening and Tempering Furnace

For example, steel undergoes structural or molecular changes at certain temperatures, called transformation points. On the rising temperatures, these are called decalescence points; on falling temperatures, recalescence points. If the steel is quenched at a temperature just above the highest point of decalescence, it will have the finest grain.

Obviously the small saw maker, without proper furnaces and precision instrucments, is guessing at his work. Occasionally he may pass exactly right at each step in the many processes, and turn out a perfect product. But his production cannot be uniformly dependable.

The HardeningFurnace
So that guess work will be replaced with scientific accuracy in the important process of heat treatment, we have installed in our plant the best hardening furnace money can buy or present scientific knowledge can devise.

It is the largest saw hardening furnace in the world heated by oil and gas, and the temperature is automatically controlled by electrical pyrometers of the latest design, used only by The Ohlen-Bishop Company, which through a system of colored signaling lights, holds the temperature to within a variation of less than 10 degrees F. This temperature control of heat treatment is one of the phases of production which makes it possible for the Ohlen-Bishop Company to warrant their products unequaled for fast cutting, toughness, uniformity and edge holding quality.

Flattening And Uniformity of pressures during the heating are equally as essential as constancy and uniformity of heat treating. The tempering furnace is therefore equipped with an automatically controlled hydraulic press with a pressure capacity of 500 pounds per square inch.

To furnish this extreme pressure steadily and with uniform constancy over the entire surface of the saw blank, and to



Pyrometer Control



control the degree of pressure applied, an accumulator is used. This accumulator is a reservoir of power from which the high pressure can be instantly drawn under perfect control.

It consists of a vertical cylinder fitted with a weighted ram. Water is pumped into the cylinder, causing the weighted ram to rise. The great weight on the confined water produces the required pressure per square inch which is transmitted under control to each press ram. The heat of the furnace during the process of flattening is pyrometer controlled as in the case of the hardening furnace.

After heat treating in the hardening furnace, the saw blanks are placed in the flattening furnace between the faces of the press. The heat is brought up to the point determined in the laboratory based on the steel analysis and purpose for which the saw is to be used, and an exactly controlled pressure applied for the correct period of time.

The Ohlen-Bishop method of tempering insures lasting tension and much of the expense of rehammering and refitting is saved. Because of this fact, Ohlen-Bishop saws have been found to be far superior to all others where a heavy feed is desired and stand up where other saws fail.

There are four of these flattening furnaces, two for circular saws, one for cross cut saws and one for hand saws, alike in principle and operation, but slightly different in design to accommodate the different shape of the saws. Each of these furnaces is operated under the close observation of men thoroughly experienced in heat-treating and, working with scientifically exact formulae and equipment, they are able to produce a superior product of unvarying uniformity and quality.

This is another phase together with the Ohlen-Bishop special analysis Chrome Nickel Alloy Steel that makes possible the warranty for unequaled fast cutting, toughness, uniformity and edge-holding quality.

The Saw

The saw blank is now ready for grinding and finishing. In these departments the same accuracy and uniformity of operation is maintained as has been described in the steps of material selection and heat treatment.

As we have shown in this brief survey of the making of Ohlen quality saws, no detail of manufacture, no matter how trivial, is left to guess. Every operation is done with scientific certainty, based not only on the sound experience of years of specialization in saw making, but also on the proved results of laboratory research.

Double-Checked Quality

Add to these seventy-five years "of knowing how" the advantages of the most modern saw making equipment, highly developed materials, accurate control of each step in production, and the ability and willingness to utilize money, materials, machines and men to fullest advantage, and you have some idea of the unusual combination of personal skill and industrial organization that make Ohlen-Bishop saws without a peer anywhere in the world.

This knowledge, experience and skill is checked and double-checked throughout the course of production by close and frequent inspections. One single supreme objective is continually in the minds of every man in the Ohlen factory—the production of the finest, most perfectly balanced, fastest cutting, and longest wearing saw that human skill can create.



MASTER SAW MAKERS SINCE 1852

- Warranty. All Saws, Knives and Files, manufactured by The Ohlen-Bishop Company are warranted to be free from any defects in material or workmanship. If any defect is found the article must be returned to us within thirty days after receipt. Returned articles will be carefully inspected and if found defective will be repaired free of charge or a new article given in replacement.
- **Orders.** We reserve the right to decline any orders received through our salesmen, agents or by mail. If orders are declined parties will be notified immediately.
- Quotations, and Prices are made for immediate acceptance and are subject to change without notice. The right is reserved to correct stenographic errors in invoices or quotations.
- **Terms** are two percent ten days or thirty days net to firms with satisfactory rating in Duns or Bradstreets, or who can furnish bank and commercial references. Otherwise goods will be shipped C. O. D. in accordance with our established custom.
- All Prices are F.O.B. factory and shipments are made at purchasers' risk. In order to avoid delays in delivery, definite routing instructions should be given with each order.
- **Shipments** should be checked on arrival and errors or shortages reported promptly.

Accounts not paid in thirty days are subject to sight draft.



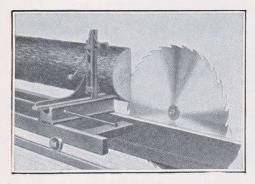
When Ordering Circular Board Saws the Following Information Should be Given in Detail

Number and Kind of Saws Wanted Diameter in Inches Hand—Right or Left Gauge or Thickness—At Center Gauge or Thickness—at Rim Number and Style of Teeth Size of Mandrel and Pin Holes

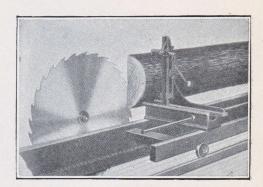
Pin Holes
Revolutions Per Minute in Cut
Greatest Feed in Inches per
Revolution
Kind of Timber to be Sawed
Horsepower of Engine or Motor

Center to Center Distance of

To determine the hand of a Circular Saw stand in front of the Saw, that is, with the Saw revolving toward you. When the log passes to the right of the Saw it is a right hand Saw. When the log passes to the left of the Saw it is a left hand Saw. See illustration below.



Right Hand



Left Hand



Gauges (Thickness) of Saws

The Fractional, Decimal and Metric Equivalents of gauges shown in the various lists in this Catalogue, are given in the following table. This table is based on the Birmingham or Stubbs Gauge which is generally used in the saw industry.

Wire Gauge Number	Fractional Part of an inch	Decimals of an inch	Millimeters
1	5–16 Scant	.300	7.62
2	9–32	. 284	7.21
3	1- 4 Full	. 259	6.57
4	15-64	.238	6.04
5	7–32	.220	5.59
6	13–64	. 203	5.18
7	3-16 Scant	.180	4.57
8	5–32 Full	.165	4.19
9	5-32 Scant	.148	3.76
10	1-8 Full	.134	3.40
11	1- 8 Scant	.120	3.05
12	7-64	.109	2.77
13	3–32	.095	2.41
14	5-64 Full	.083	2.10
15	5-64 Scant	.072	1.82
16	1–16 Full	.065	1.65
17	1–16 Scant	.058	1.47
18	3-64	.049	1.24
19		.042	1.06
20		.035	.89
21	1–32	.032	.81
22		.028	.71
23		.025	.64
24		.022	.56
25		.020	.51
26		.018	.46
27	1–64	.016	.41
28		.014	.36
29		.013	.33
30		.012	.30



Standard Number of Teeth and Average Speed of Solid Tooth Circular Saws

Diameter	Revolutions	Numl	per of Teeth	Diameter	Revolutions	Number	of Teeth
Inches	Per Minute	Rip	Cut Off	Inches	Per Minute	Rip	Cut Off
8	4600	36–40	100	40	980	36	80
10	3920	30-36	90-100-120	44	890	44	80
12	3260	30-36	90-100-150	48	795	36-48	90
16	2450	30-36	80-90-100-120	52	765	40-60	90
20	1960	30-36	80	56	680	40-56-80	90
24	1630	30-36	72	60	635	60-80-90	120
28	1400	36	72	64	600	60	120
32	1225	36	72	68	560	60	120
36	1080	36	80	72	530	90	120

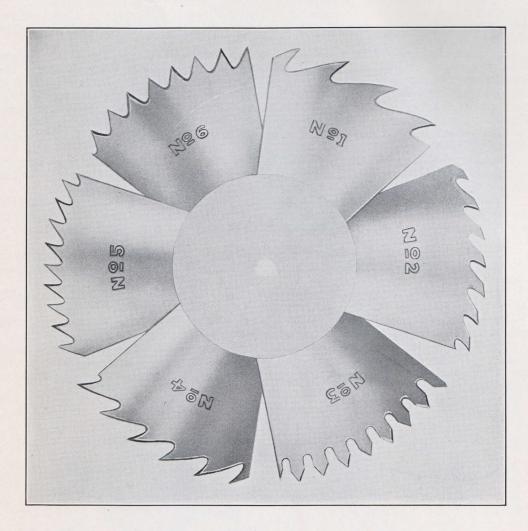
The Speeds given in above Table are based on a Rim Speed of 10,000 Feet per Minute.

Revolutions per Minute and Number of Teeth Recommended For Large Circular Saws

Diameter Inches	Kind of Saw	Feed Per Rev.	Rim Speed Ft. Per Min.	Rev. Per Min.	Number of Teeth
48	Splitting	4 in. to 6 in.	10,000	795	48
48	Splitting	4 in. and less	8,000	640	36
48	Cut Off				90
50	Splitting	4 in. to 6 in.	10,000	765	54
50	Splitting	Over 6 in.	12,000	915	80
50	Splitting	4 in. and less	8,000	610	40
50	Cut Off		0		100
52	Splitting	Over 6 in.	12,000	890	90
52	Splitting	4 in. and less	8,000	585	40
52	Splitting	4 in. to 6 in.	10,000	735	60
52	Cut Off				90
54	Splitting	Over 6 in.	12,000	850	90
54	Splitting	4 in. and less	8,000	565	40
54	Splitting	4 in. to 6 in.	10,000	705	54
54	Cut Off				90
56	Splitting	Over 6 in.	12,000	820	90
56	Splitting	4 in. and less	8,000	545	40
56	Splitting	4 in. to 6 in.	10,000	680	56
56	Cut Off				90
60	Splitting	Over 6 in.	12,000	765	80-90
60	Splitting	4 in. to 6 in.	10,000	635	60
60	Cut Off				120
62	Splitting	Over 6 in.	12,000	740	90
66	Cut Off			695	120
72	Splitting	Over 6 in.	12,000		90
72	Cut Off				120



Standard Styles of Teeth for Circular Saws



Only a few of the numerous patterns of Solid Circular Saw Teeth are illustrated above. Orders should specify the style of Tooth desired by referring to numbers shown above.

Style of Tooth Furnished Unless Otherwise Specified

Rip Saws under 38 inches	No. 4
Rip Saws 38 inches and over	No. 1
Cut Off Saws under 36 inches	No. 5
Trimmer and Slasher Saws	No. 6



Ohlen-Bishop Solid Tooth Circular Saws

A S maximum production requires heavy feed and is a severe strain on Circular Saws, all experienced mill men realize the importance of toughness and edge-holding qualities

when sawing good lumber.

All Ohlen-Bishop Solid Tooth Circular Saws are made of a Special High Grade Chrome Nickel Alloy Steel. This steel is of a special analysis prepared for our exclusive use. This insures lasting tension and, consequently, much of the expense of re-hammering and refitting is saved. Ohlen-Bishop Solid Tooth Saws have been found to be far superior to all others where a heavy feed is desired. This fact shows that Ohlen-Bishop Solid Tooth Saws, because of the toughness and lasting tension in the plate, stand up where other Saws fail. Furthermore, we use but one grade of steel, CHROME NICKEL ALLOY, in OHLEN-BISHOP Circular Saws.

Because of the severe strain of swaging or spreading hardened steel, Saws carrying swaged teeth should not be made of the steel ordinarily used in spring set saws. To prevent

splitting of teeth and the losing of corners requires the addition of NICKEL.

To further increase their toughness and edge-holding qualities, OHLEN-BISHOP have added **Chrome**, which is the most active element known in causing steels to respond to heat treatment and give the greatest depth of hardness with a minimum danger of cracking.

The added advantage in using OHLEN-BISHOP CIRCULAR SAWS is that we use but one quality steel, CHROME NICKEL ALLOY, in all our Circular Saws, which can

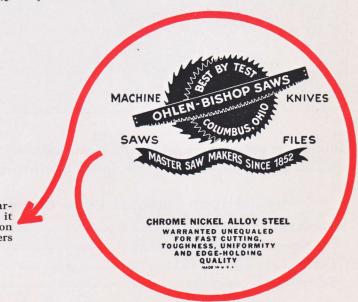
be either swaged or set.

The workmanship on Ohlen-Bishop products is of the highest grade as is evidenced by our reputation maintained for over seventy-five years as "Master Saw Makers."

Our equipment is designed to satisfy the exacting needs of mill men who realize the

importance of having Saws made correctly.

Our furnaces are electrically controlled by pyrometers of latest design. Our flatteners are all under uniform pressure at all times as they are governed by an Accumulator. Because of these features our Saws are manufactured under constant pressure and temperature—necessary essentials in a Quality Saw.



This is a strong guarantee, but we back it up with our reputation as Master Saw Makers since 1852.



WE SELL NOT ONLY SAWS-BUT

Simplified Solid Tooth Circular Saw Price List

Uncertainty and unnecessary figuring eliminated.

Heavy Type shows Saws specified by the majority of the trade on which prompt shipment can be made.

Diam.	Ga.	Hole		Split No. of	t ing Teeth						ut-Off of Teet	h			1 Gauge Beveled NoCharge	Beveled Over 1 Gauge Per Gauge
4 5 6 7	19 19 18 18	3/4			36	40 40 40 40					100 100 100 100				\$3.30 3.30 3.30 4.40	\$.25 .25 .25 .35
8 8 10 10	18 16 16 15	3/4 3/4 1 1		30 30	36 36 36 36	40 40				90	100 100 100	120			4.40 4.50 5.60 5.60	.35 .35 .45 .45
10 10 10 12	14 13 12 16	1 1 1 1 1	L24	30 30	36 36 36 36										5.80 6.00 6.20 7.00	.45 .45 .45 .55
12 12 12 12 12	15 14 13 12	1 1 1 1 1	L24	30 30 30 L30	36 36 36 36			72		90 90	100 100		150 150		7.00 7.00 7.30 7.60	.55 .55 .55 .55
12 14 14 14	11 15 14 13	1 1½ 1½ 1½ 1½		30 30 30	36 36 36	40			80	90 90	100	120			7.90 8.50 8.50 8.50	.55 .65 .65 .65
14 14 16 16	12 10 14 13	1½ 1½ 1½ 1½ 1½	L24	30 30 30 30 30	36 36 36	40			80 80	90	100 100	120		200	8.90 9.70 10.50 10.50	.65 .65 .75 .75
16 18 18 18	12 14 13 12	1½ 1¼ 1¼ 1¼ 1¼		30 30 30 .	36 36 36 36		60		80 80	90	100	0			11.00 12.50 12.50 12.50	.75 .90 .90
18 18 20 20	10 9 13 12	$ \begin{array}{c} 1\frac{1}{4} \\ 1\frac{5}{16} \\ 1\frac{5}{16} \end{array} $		30 B E30	36 36				80 80						13.70 14.30 15.00 15.00	.90 .90 1.05 1.05
20 22 24 24 24	8 12 11 10	1 5 1 5 1 3 8 1 3 8	E24	B E30	36 36			72 72 772							18.00 17.50 20.50 20.50	1.05 1.20 1.35 1.35
24 26 26	8 11 10	13/8 13/8 13/8		B E30	36			72 T72							22.60 24.00 24.00	1.35 1.55 1.55
26 26 28 30	8 7 10 10	13/8 13/8 11/2 11/2 11/2		E30 E30	36 36			T72 T72 S72							26.50 27.75 28.00 32.00 32.00	1.55 1.55 1.75 1.95 1.95
$\frac{30}{32}$ $\frac{32}{32}$	9 10 9 8	15/8 15/8 15/8 15/8			36			T S72 72							36.50 36.50 38.50	2.15 2.15 2.15
34 34 36 36	8 9 8	15/8 15/8 15/8 15/8			36			s72	80 s80						41.00 41.00 47.00 47.00	2.35 2.35 2.55 2.55 2.75
38 38 40	9 8 7 9	15/8 15/8 15/8 2 2			36				\$80 \$80						54.00 54.00 57.00 62.00 62.00	2.75 2.75 2.75 2.95 2.95
40 40 40 42 42	8 7 6 8 7	2 2 2 2 2		36					\$80 \$80 \$80						65.40 68.80 71.00 71.00	2.95 2.95 3.25 3.25

L-Lath. B-Bolter. E-Edgers. T-Trimmers. s-Slashers.





Simplified Solid Tooth Circular Saw Price List-Continued

Dia.	Ga.	Hole				Spli	tting					Cu	t-Off		2 Gauges Beveled No Ch'rge	Beveled Over 2 Gauges
Dia.	Ga.	11016		A TABLE		No. of	Teeth					No. o	of Teeth		Price	Per Gauge
44 46 48 48	8 8 7-8 7	2 2 2 2 2			48						80	90			\$ 83.00 98.00 112.00 112.00	\$3.55 3.85 4.15 4.15
48 50 50 50	8-9 6 8-9 9-10	2 2 2 2 2	36	40		54			80				100		112.00 127.00 127.00 127.00	4.15 4.45 4.45 4.45
52 52 54 54	6 7 7 8–9	2 2 2 2 2		40 40		54		60		90 90		90 90			142.00 142.00 157.00 157.00	4.80 4.80 5.15 5.15
56 56 58 60	6 8-9 7 6	2 2 2 2 2		40			56		80	90		90		120	180.00 180.00 200.00 224.00	5.50 5.50 5.95 6.40
60 60 60 62	7-8 7 8-9 6	2 2 2 2 2					TO SERVICE SER	60	80	90 90					224.00 224.00 224.00 250.00	6.40 6.40 6.40 6.85
64 66 68 70	6 6 5 5	2 2 2 2 2												120	280.00 310.00 350.00 400.00	7.35 7.85 8.45 9.05
72 74 76 78	5 5 5 5	2 2 2 2 2								90				120	450.00 510.00 575.00 690.00	9.65 10.30 11.00 11.85
80 82 84	5 5 5	2 2 2 2													810.00 940.00 1075.00	12.90 14.10 15.40

See Discount Sheet

The foregoing list includes practically all gauges required by the trade. To arrive at list prices of special gauge saws not covered by above list, add to the price of standard gauge saws (shown in heavy type) the extra gauge cost as shown by following table.

No extra charge for saws one gauge heavier than standard.

Diameter	Extra for Each Gauge Heavier						
6 8	\$.07	26 28	\$1.25 1.50	46 48	\$ 5.15 5.90	66 68	\$22.00° 26.40
10 12	.20	30 32	1.75	50 52	6.65 7.40	70 72	30.80 35.20
14 16	.40 .50	34 36	2.25 2.60	54 56	8.80 10.25	74 76	39.60 44.00
18 20	.60	38 40	3.00	58 60	11.75 13.25	78 80	49.85 55.75
22 24	.90 1.05	42 44	3.80 4.40	62 64	14.75 17.60	82 84	63.05 70.40



Resawing or Siding Saws Ohlen-Bishop Simplified Price List

Uncertainty and unnecessary figuring eliminated.

Figures in Heavy Type show Saws, specified by the majority of the trade on which prompt shipment can be made.

Dia.	Gauge	Collar	Teeth	Price	Dia.	Gauge	Collar	Teeth	Price
16 16 16	13-17 12-16 11-15			\$12.75 13.25 13.75	28 28 30	9-14 8-13 9-13			\$35.00 36.50 37.85
18 18 18	12-16 11-15 12-17	4½	36	15.20 15.80 16.10	30 30 30	9-14 8-13 10-14	7½	40	39.80 41.55 37.85
20 20 20 20 20	12-16 11-15 12-17 10-14	5	36	18.15 18.90 19.20 19.65	32 32 32 32 32	9-13 9-14 8-13 10-14	8	50	42.95 45.10 47.10 42.95
22 22 22	11–15 10–14 11–16	5½	36	21.10 22.00 22.30	34 34 34	9–13 8–13 8–14	8½	60	48.05 50.40 52.75
24 24 24	10-14 9-13 10-15	6	36	24.55 25.60 25.90	36 36 36	8-13 8-14 7-14			57.20 59.75 64.90
26 26 26	10–14 9–13 10–15	6½	40	28.65 29.90 30.20	36 38 38	10–15 8–12 8–13	9	50	57.20 62.25 65.00
28	9–13	7	50	33.25	38	7-13			70.75

Figure sizes not listed above same as Solid Circular Saws, adding for gauges heavier than standard and for gauges beveled. No extra charge for one gauge heavier or one gauge beveled.

Solid Tooth Edger Saws

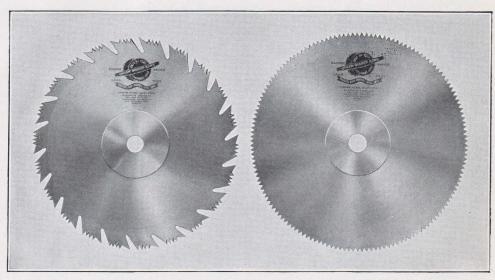
Diameter	List Price									
Inches	8 Gauge	9 Gauge	10 Gauge	11 Gauge	12 Gauge					
12 14 16	\$ 8.80 10.50 13.00	\$ 8.50 10.10 12.50	\$ 8.20 9.70 12.00	\$ 7.90 9.30 11.50	\$ 7.60 8.90 11.00					
18 20 22	14.90 18.00 20.20	14.30 17.25 19.30	13.70 16.50 18.40	13.10						
24 26	22.60 26.50	21.55	20.50							

For other sizes of Edger Saws use solid tooth saw price list page 15.



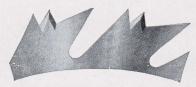


Ohlen-Bishop Mitre and Novelty Saws



Novelty Tooth

Mitre Tooth



Style "A"



Style "E"



Style "B"



Style "F"



Style "D"



Style "G"

Unless otherwise specified, Style B is furnished on Novelty Saws.

See Discount Sheet



WE SELL NOT ONLY SAWS-BUT

Ohlen Bishop Mitre and Novelty Saws

Mitre and novelty saws are recommended for fine work where an extremely smooth cut is desired. They are hollow ground, that is gradually tapered from the tooth edge to the collar and run without set. Their use is not recommended where fast production is required.

Novelty saws are made for both splitting and Cross Cutting.

		GAUGE		Size	No. of	Style of	Style of	Price	Extra For Each	Extra For Each Add
DIAM.	At Center	At Collar	At Teeth	Collar	Teeth Mitre	Teeth Mitre	Teeth Novelty	Each	Gauge Heavier	Gauge Concaving
6	17	20	17	21/2	150	F	В	\$5.40	\$.07	\$.50
8	16	19	16	31/4	150	F	В	6.80	.10	.70
10	15	18	15	31/2	150	F	В	8.60	.20	.90
12	14	17	14	4	150	F	В	10.60	.30	1.10
14	13	16	13	4½	200	F	В	12.60	.40	1.30
16	13	16	13	5	200	F	В	14.80	.50	1.50
18	12	15	12	51/2	200	F	В	17.40	.60	1.80
20	12	15	12	6	250	F	В	20.60	.75	2.10
22	11	14	11	6½	250	F	В	24.20	.90	2.40
24	11	14	11	7	250	F	В	28.00	1.05	2.70

Above list covers standard saws which are carried in stock and on which prompt shipment can be made.





Diam.	Price	Diam.	Price
6	\$ 5.55	16	\$15.80
8	7.00	18	18.60
10	9.00	20	22.10
12	11.20	22	26.00
14	13.40	24	30.10

Made only with Style "B" Tooth and in standard

The Ohlen-Bishop Jointer Saw is made to meet the demand for a saw which will stand up in hard or soft

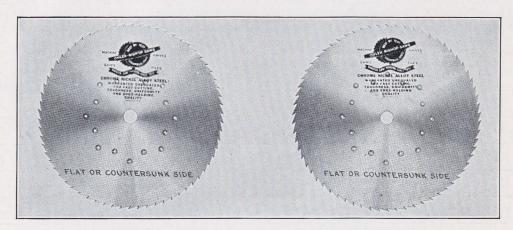
wood under a fast hand feed and which will work equally well as a Splitting, Cross-Cutting or Mitering Saw.

The Jointer saw will give a smooth cut which in the past could be secured only with a novelty or mitre saw, and because of our improved method of grinding can be used for many different kinds of work.





Ohlen-Bishop Shingle and Heading Saws



Left Hand

Right Hand

Ohlen-Bishop Simplified Price List

Uncertainty and unnecessary figuring eliminated

Figures in Heavy Type show Saws, specified by the majority of the trade on which prompt shipment can be made.

Diam.	Gauge	Teeth	Price	Diam.	Gauge	Teeth	Price
36	9–17	90	\$62.00	44	9–17		\$113.55
38	9–16	60	70.00	46	8-17	60	128.85
38	9-16	100	70.00	48	8-16		145.00
38	9-17	60	70.00	50	7-15		170.00
40	8-17	60	82.95	52	7-15		200.00
40	9-17		80.00	54	7-15		230.00
42	8-17	60	98.25	56	7-15		260.00
42	9-17		95.00	58	7-15		290.00
44	8-17	60	110.00	60	6-14		320.00

Fitting old Flanges to Saws-\$8.00 each.

Bevel starts 2 inches outside pinholes unless otherwise specified.

For Saws beveled more than eight gauges and thicker at center than shown above add for extra gauges and extra beveling same differentials as shown on pages 15, 16 for Solid Circular Saws.

Be sure to give diameter, gauge at center and at rim, number of teeth, hand, speed, and maker of machine when ordering Shingle or Heading Saws.

Send us sample screw and template of flange to guide us in drilling and countersinking holes.



A Few Hints on the Proper Care of Shingle Saws

TO secure maximum production and high uniform quality of shingles requires a Saw that will hold its cutting edge and tension without the necessity of too frequent hammering and fitting.

Ohlen-Bishop Chrome Nickel Steel Shingle Saws meet these requirements in a highly satisfactory manner. The high percentage of Chrome and Nickel in the Steel from which our Shingle Saws are made insures lasting tension and edge-holding qualities.

The successful operation of a Shingle Saw depends, to a great extent, on the proper care of the Saw. Frequent inspection should be made of the Saw Arbors and Flanges which can very easily cause the Saw to be out of true—consequently, making the production of smooth shingles impossible.

Shingle Saw Teeth must be kept sharp, of uniform shape, and equally distant. The Saw as it comes from the factory has the proper tooth, spacing and hook and should not be changed. Either too much or not enough hook will affect the running of the Saw and the quality of the shingles.

The use of automatic machines for sharpening Shingle Saws is highly recommended. These machines keep the tooth space and hook of the tooth uniform and also keep the Saw in a perfectly round shape. If these points are carefully watched in running and caring for Shingle Saws very little trouble will result and the product will be uniformly good.



Ohlen-Bishop Slate Saws

		Unground		
Diameter	Thick Gauge	Inches	Price	Extra for each $\frac{1}{32}$ Heavier
36	4	15_{64}	\$26.00	\$2.30
38	4	15/64	29.00	2.55
40	4	15/64	32.00	2.85
42	3	17/64	38.00	3.15
44	3	17/64	40.00	3.45
46	3	17/64	42.00	3.75
48	2	$\frac{9}{32}$	47.00	4.10
36	0	$\frac{11}{32}$	34.00	
38	0	$\frac{11}{32}$	38.00	
40	0	$\frac{11}{32}$	42.00	
42	0	$\frac{11}{32}$	45.00	
44	0	$\frac{11}{32}$	49.00	
46	0	$\frac{11}{32}$	53.00	
48	0	$\frac{11}{32}$	57.00	
36	00	3/8	37.00	
38	00	3/8	41.00	
40	00	3/8	45.00	
42	00	3/8	49.00	
44	00	3/8	53.00	t. f
46	00	3/8	57.00	
48	00	3/8	61.00	mantling to



MASTER SAW MAKERS SINCE 1852

Ohlen-Bishop Slate Saws

Hollow Ground

D:	Thic	kness	D .	Extra for each gauge heavier	
Diameter	Gauge	Inches	Price		
14	10	1/8	\$ 7.00	\$.35	
16	10	1/8	8.50	.40	
18	9	$\frac{5}{32}$	10.50	.50	
20	8	$\frac{11}{64}$	13.50	.65	
22	7	$\frac{3}{16}$	16.00	.80	
24	6	$\frac{13}{64}$	20.00	1.00	
26	_ 6	$\frac{13}{64}$	23.00	1.20	

Straight Ground

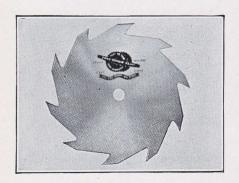
D'	Thic	kness	D.	Extra for each
Diameter	Gauge	Inches	Price	Extra for each gauge heavier
14	10	1/8	\$ 4.50	\$.25
16	10	1/8	5.00	.30
18	9	5 32	6.50	.35
20	8	11 64	8.00	.40
22	7	3 16	10.00	.50
24	6	$\frac{13}{64}$	12.00	.60
26	6	$\frac{13}{64}$	14.00	.75
28	5	$\frac{7}{32}$	16.00	.90
30	5	$\frac{7}{32}$	19.00	1.10
32	5	$\frac{7}{32}$	22.00	1.25
34	5	$\frac{7}{32}$	25.00	1.40



Ohlen-Bishop Lathe Saws

Diam. Inches	Gauge	Price Each	Extra for Each Additional Gauge (heavier)	Diam. Inches	Gauge	Price Each	Extra for Each Additional Gauge (heavier)
8	9	\$3.40	\$0.20	14	6	\$6.00	\$0.35
Q	8	3.60	.20	15	5	6.60	.40
10	7	4.00	. 25	16	5	7.40	.40
11	7	4.40	.30				
12	6	4.80	.30				
13	6	5.40	.35				

All Lathe Saws less than 8 inches in diameter take list of 8 inch saw.



SOLID TOOTH GROOVING SAWS

Di	37 6	Thickness										
Diam. Inch	No. of Teeth	1/8"	3 "	1/4"	16"	3/8"	716"	1/2"	5/8"	3/4"		
4	5	\$ 3.60	\$ 3.80	\$ 6.20	\$ 7.00	\$ 8.00	\$ 8.80	\$ 9.60	\$14.00	\$14.60		
4 5	6	4.20	4.40	7.20	8.00	9.20	10.20	11.20	16.80	17.80		
6	8	5.20	5.40	8.20	9.20	10.40	11.60	12.80	19.60	21.00		
7	8	6.00	6.40	9.20	10.40	11.60	13.00	14.40	22.80	23.6		
	10	6.80	7.40	10.20	11.60	13.20	14.80	16.40	26.00	27.0		
8	10	7.40	8.40	11.40	13.00	14.80	16.60	18.40	29.20	31.0		
10	10	8.20	9.40	12.60	14.40	16.40	18.40	20.40	33.40	35.0		
	11	10.60	11.80	14.00	16.80	18.80	21.00	22.40	36.60	39.0		
11	12	11.60	12.80	15.40	19.20	21.40	23.60	24.80	39.80	43.0		
12	12	11.00	12.00	13.40	17.20	21.10	23.00		En Char			
14	14	13.80	15.40	17.80	22.20	26.00	28.20	29.80	45.00	49.8		
16	16	15.40	18.40	21.20	26.00	30.60	33.40	35.60	53.00	59.0		

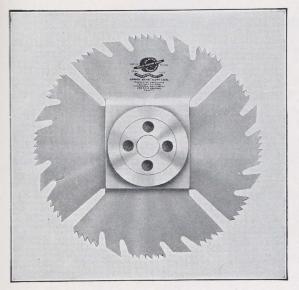
All Grooving Saws under 4 inches in diameter take 4 inch list.

Beveled Grooving Saws, add 10 per cent to above prices.

Grooving Saws with teeth shaped and backed off, add 50 per cent to above prices.

Special Grooving Saws made to order, special prices.



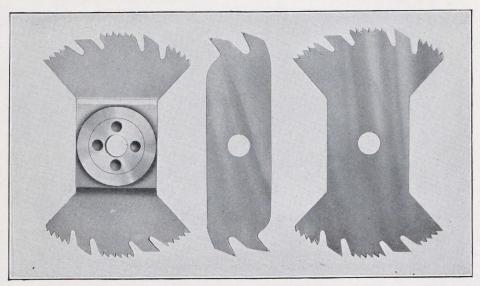


Simple and Practical

Ohlen Burke Patented Adjustable Groover or Dado Head

This Groover of Exceptional Merit has two side saws with cross cutting teeth and ripping teeth so that it will cut with or across the grain with perfect smoothness. Each set consists of two outside saws, and two or more inside saws. Outside saws on all sets are ½" thick.

The adjustment consists of outside saws with off-set and threaded bushing. By turning the bushing one way or the other, up to one-eighth inch variations may be obtained without adding or removing any inside saws. Any width groove from ½ to 2 inches or more can be made by adding inside saws and varied by the minutest fraction of an inch without the use of paper or other filling.



Outeido Sawe	Inside Saws	Outside Saw

PR	RICE LIS	T OF CO	MPLETE	SETS	PRICE	LIST OF S	SEPARATI	E PARTS	SPECIFICATIONS			
Diam. Inches	Set No. 1	Set No. 2	Set No. 3	Set No. 4	Outside Saw with Collar	Outside Saw without Collar	Inside Cutter 1/8" thick	Inside Cutter ¼" thick	Set No.	Variation of Grooves	Inside	nber of Cutters
inches									-	7/1-2/11	1	1
8 9	\$30.00	\$33.30	\$39.90 42.80	\$46.50 49.80	\$16.20 17.15	\$ 8.00 8.95	\$2.50 2.70	\$3.30 3.50	2	½ to ¾" ½ to 1"	1	2
10	35.75 44.00	39.50 48.40	47.00 57.20	54.50 66.00	18.65	10.45 14.05	2.90 3.30	3.75 4.40	3	1/8 to 11/2"	1	4
14	53.30	58.75	69.65	80.55	26.15	17.95	3.75	5.45 6.70	4	½ to 2"	1	6

SAW SERVICE AND SATISFACTION



Price List for Repairing Circular Saws

		Gum	Cut Down Retooth	Gr	inding	Set and Sharpen	
Diameter	Hammer	and Hammer	and Hammer	First Gauge	Each Additional Gauge	Cut-off	Rip
6	\$0.45	\$0.55	\$0.75	\$0.65	\$0.35	\$0.45	\$0.35
8	.55	.75	1.00	.85	.55	.55	.40
10	.75	1.00	1.30	1.05	.75	.65	.50
12	.90	1.35	1.60	1.15	.85	.75	.60
14	1.05	1.60	1.90	1.35	1.00	.85	.70
16	1.20	1.80	2.20	1.60	1.15	.95	.80
18	1.45	2.10	2.55	1.95	1.30	1.05	.90
20	1.65	2.50	2.95	2.20	1.45	1.15	1.00
22	1.90	2.85	3.30	2.40	1.60	1.30	1.10
24	2.10	3.25	3.70	2.70	1.75	1.45	1.20
26	2.40	3.70	4.20	3.00	1.90	1.60	1.30
28	2.70	4.15	4.75	3.40	2.05	1.75	1.40
30	3.00	4.60	5.35	3.75	2.20	1.95	1.50
32	3.30	5.05	6.00	4.15	2.35	2.15	1.60
34	3.70	5.55	6.90	4.50	2.55	2.35	1.73
36	4.30	6.15	7.80	4.90	2.80	2.55	1.90
38	4.80	7.00	9.00	5.25	3.00	2.75	2.03
40	5.55	8.05	10.20	5.65	3.30	2.95	2.20
42	6.30	9.15	11.55	6.00	3.60	3.15	2.35
44	7.05	10.35	13.05	6.45	4.05	3.35	2.50
46	7.95	11.80	14.70	7.00	4.50	3.60	2.65
48	8.85	13.20	16.50	7.60	4.95	3.80	2.85
50	9.75	14.65	18.40	8.25	5.40	4.10	3.05
52	10.65	16.05	20.25	9.00	5.95	4.40	3.25
54	11.55	17.55	22.15	9.90	6.30	4.70	3.50
56	12.45	19.05	24.00	10.90	6.75	5.00	3.75
58	13.50	20.70	25.90	12.00	7.20	5.30	4.00
60	14.70	22.50	27.75	13.20	7.75	5.60	4.25
62	15.90	24.30	30.40	14.40	8.25	6.00	4.50
64	17.10	26.10	33.00	15.60	8.85	6.30	4.75
66	18.30	27.90	35.65	16.80	9.45	6.60	5.00
68	19.50	29.70	38.25	18.00	10.15	6.90	5.25
70	20.50	31.50	40.90	19.50	11.05	7.20	5.50
72	21.90	33.30	43.50	21.00	12.00	7.50	5.75
74	23.10	35.10	46.15	22.50	13.15	7.80	

Saws smaller than 6 inches take 6 inch price.

Saws of odd diameter, take the price of next larger size.

When saw is ground, add price of hammering to price of grinding. Gumming and retoothing prices cover sizes of saws after they have been repaired. All breakages of risk of owner.

Burned Saws. We repair burned saws at two-thirds price of new ones, which includes retempering, grinding, hammering, polishing, etc.

Changing Solid Saws to Inserted Tooth Saws, or cutting down Inserted Tooth Saws, price is \$2.00

Changing Solid Saws to Inserted Tooth Saws, or cutting down Inserted Tooth Saws, price is \$2.00 per tooth plus one-half the list price of Solid Tooth Saws of same size, this price being based on size the saw will cut to, and subject to same discount as Inserted Tooth Saws. Same extras furnished as with a new saw.

Repairing Burned Inserted Tooth Saws, two-thirds the price of a new Solid Tooth Saw of the same diameter, plus 30 cents per tooth. Add for any points and shanks inserted at regular prices. No extras furnished.

Shingle and other thin bevel saws generally will not permit being retempered.

All repairs are at risk of owner, but no charge will be made in case of failure.

Owner's name should appear on each package or board to insure identification at the factory.



MASTER SAW MAKERS SINCE 1852

Repairing Shingle and Heading Saws

When Hammered only use regular repair list.	
Grinding and Hammering	
34 to 38" inc	50 each
Over 38 to 42" " 7	50 "
" 42 to 46" "10.	00
" 46 to 50" "13.	00
" 50 to 54" "16.	00
" 54 to 60" "	00
All Shingle or Heading Saws sent in to be reground will be hammered and charge made according Re-drilling old Shingle Saws to fit other collars \$5.00.	ly.
Repairing Inserted Tooth Saws	
Brazing 1 point or section\$5.	75 each
Brazing 2 points or sections.	00 "
Brazing 3 points or sections	50 "
Brazing 4 or more points or sections charge at rate of \$2.50 [oer hour
Repairing Long Saws	
MILL MULAY AND EQUAL WIDTH DRAG SAWS	
Length feet To 5	Over 5
Re-toothing and hammeringeach \$2.25	\$3.00
Hammering onlyeach 1.50	2.25
TAPER DRAG SAWS	Ф2 00
Re-toothing, hammering and filingeach	\$3.00
Hammering only each	1.50
Setting and sharpening onlyeach	1.50
Re-toothing and hammering only each	2.23
CROSSCUT SAWS	
Hammeringeach	\$1.05
Gumming and hammering each	1.50
Gumming, hammering, filing and setting each	2.25
Re-toothing, hammering, filing and setting each	3.00
Setting and sharpening only each	1.05
Skimming and polishing each	.75
BAND SAW BLADES	
Brazing wide blade for log mill per inch in width	\$0.75
Hammering Per foot for each inch in width	$.07\frac{1}{2}$
Gumming and toothing per running foot	.12
Filing and swaging per running foot	.12
NARROW BAND SAWS	
Filing and setting per foot	\$0.08
Brazing ¼ inch to ½ inch	\$0.90
Brazing 5% inch to 7% inch	1.13
Brazing 1 incn to 1¼ inchper braze	
Brazing 13% inch to 1½ inch per braze	1.80
Brazing 1¾ inch per braze	2.05
2 1/4	

SAW SERVICE AND SATISFACTION



Ohlen-Bishop Inserted Tooth Saws



Ohlen-Bishop Inserted Saws are made of the same high grade Chrome Nickel Alloy Steel as our Solid Tooth Saws. This insures lasting tension and, consequently, much of the expense of re-hammering and re-fitting is saved. Our Inserted Tooth Saws have been found to be far superior to all others where a heavy feed is desired. This fact shows that Ohlen-Bishop Inserted Saws, because of the toughness and lasting tension in the plate, together with our accurately tempered teeth, must stand up where other saws fail.

We manufacture all the standard style teeth. All of our teeth are accurately made, insuring the user of a perfect fitting joint. Our machinery for milling the "V" in teeth is especially designed for accuracy and quality.

Special attention is called to our double shoulder Saws Nos. 77 and 22, illustrated on the following pages. Because of their double support these Saws are very popular where a Saw is required to work under great strain.



MASTER SAW MAKERS SINCE 1852

Simplified Inserted Tooth Saw Price List
Uncertainty and unnecessary figuring eliminated
Heavy Type shows saws which the majority of the trade specify on which prompt shipment can be made.
Style 2½

			Style 2½		
Diameter	Gauge	Hole	Standard No. of Teeth	Greatest No. of Teeth	Price
10	12			10	\$27.00
12	11			12	32.00
14	10	1	12	14	37.00
16	10		12 14	16	43.00
16	9	1		16	43.00
18	10	The state of		20	49.00
20	0			22	55.00
22	9			24	61.00
22		- 1	10		61.90
22	7	1	18	24	
24	0	1	18	24	62.80 68.00
22 24 24	6 9 6		20	26 26	70.10
24		1	20	20	70.10
26	9			28 28 30 32	75.00
26	6 9 9	1	20	28	77.50
28	9 .			30	82.00
30	9			32	90.00
30	6	1	24	32	93.50
30	6	1 1½	26	32	93.50
30 32	8	1/4	20	32 34	100.00
34	6 6 8 8			36	110.00
36					120.00
36	8 6 8 8	11/2	28	38 38 42 44	122.60
20	0	1/2	20	12	130.00
36 38 40	8			42	140.00
40	8				
42	8			46 50 52 52	150.00
44	8		The second second second	50	165.00
46	8 .			52	180.00
46	8 8 8 8 8-9	2	44	52	180.00
48	8			54 54 54	200.00
48	7–8	2	46	54	200.00
48	8-9	2	46	54	200.00
48	8 7–8 8-9 8–9	2 2 2	52	54	200.00
50	8 7–8 8-9 8–9			56	220.00
50	7_8	2	48	56	220.00
50	8-9	2	48	56	220.00
50	8 0	2 2 2	50	56	220.00
	0-9			- 50	
50	8–9	2 2	54	56	220.00
50	8-9	2	56	56 60 60	220.00
52	- /			00	245.00
52	7–8	2	50		245.00
52 52 54	8-9	2 2	50	60	245.00
52	8–9 7	2	56	60 62	245.00
54	7			62	275.00
54	7–8	2	52	62	275.00
54	8-9 7	2	52	62 64	275.00
56	7			64	310.00
56	7–8	2	54	64	310.00
56	4-5	2 2	52	64	330.50
58	7		-		340.00
60	7			66 70 74 76	375.00
62	7			7.1	420.00
64	6			76	470.00
	6			70	
66	6 6 6			78 80 82	520.00
68 70	6			80	575.00
70	6			82	630.00
72	6			84	685.00

One extra set of teeth and two extra shanks given with each saw. One wrench given with each saw or saws. See Discount Sheet set of saws.

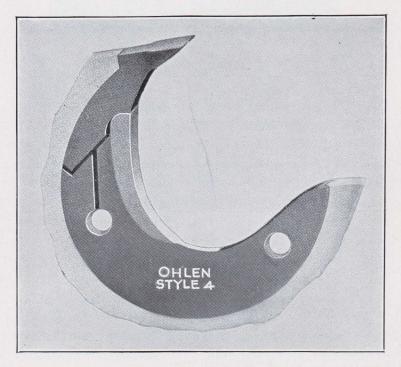
SERVICE AND SATISFACTION

Ohlen-Bishop Inserted Tooth Saws



Ohlen-Bishop Inserted Saw Teeth are accurately made and carefully inspected.

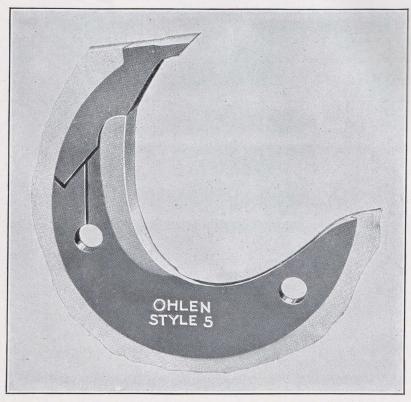




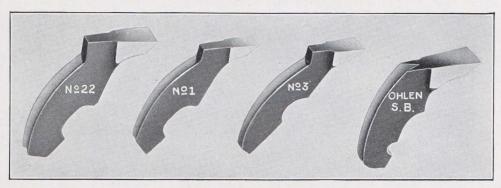


MASTER SAW MAKERS SINCE 1852

Ohlen-Bishop Inserted Tooth Saws



Principally used on the Pacific Coast where Coarse Teeth are desired Ohlen-Bishop Inserted Teeth



Ohlen-Bishop Inserted Tooth Saws

Ohlen-Bishop Simplified Price List

Uncertainty and unnecessary figuring eliminated

Heavy Type show Saws which the majority of the trade specify on which prompt shipment can be made.

Styles 3, 4, and 5

D:	Gauge	Hole		Standard No. of Teet	h	N	h	Price	
Diam.	Gauge	riole	3	4	5	3	Vo. of Teet	5	
16 16 16 18	10 8 7 10	1 1	12 12 14			12 12 12 14			\$39.00 39.50 40.00 44.00
18 20 20 20	7 9 8 7	1 1 1	14 14 16 16			14 16 16 16			45.20 50.00 50.00 50.75
22 22 22 24	9 7 7 9	1 1	16 14 16 18	12 14	10 12	18 18 18 18	14 16	12 14	56.00 56.90 56.90 62.00
24 24 24 26	7 6 6 9	1 1 1	18 18 20 18	14	12	18 18 20 20	16	14	63.05 64.10 64.10 68.00
26 28 30 30	6 9 9 6	1	20 18 20 24	16 16	14 14	20 22 24 24 24	18 20	14 18	70.50 74.00 80.00 83.50
32 32 32 34	8 6 6 8	$\frac{1\frac{1}{2}}{1\frac{1}{2}}$	22 24 26 22	18 20	16 18	26 26 26 28	22 24	20	88.00 90.00 90.00 97.00
36 36 38 40	8 6 8 8	1½	24 26 24 26	20 22 24	18 20 20	30 30 32 34	26 28 30	22 22 24	106.00 108.60 115.00 125.00
42 44 44 46	8 8 8-9 8	2	28 30 30 32	26 26 28	22 24 24	36 38 38 40	32 34 36	26 26 28	137.00 150.00 150.00 165.00
46 46 48 48	7–8 8–9 8 8–9	2 2 2	36 36 34 36	30	26	40 40 42 42	36	28	165.00 165.00 180.00 180.00
48 48 50 50	8-9 7-8 8 8-9	2 2 2	40 36 36 36 36	32	28	42 42 44 44	38	30	180.00 180.00 200.00 200.00

One extra set of teeth and two extra shanks given with each saw. One wrench given with each saw or set of saws.

See Discount Sheet



Ohlen-Bishop Inserted Tooth Saws-Continued

Ohlen-Bishop Simplified Price List

Uncertainty and unnecessary figuring eliminated

Heavy Type show Saws, which the majority of the trade specify on which prompt shipment can be made.

Styles 3, 4 and 5

Diam.	Gauge	Hole	3 N	Standard No. of Teetl 4	n 5	3	Greatest No. of Teet 4	h 5	Price
50 50 50	8–9 8–9 8-9	2 2 2	40 42 44			. 44 44 44			\$200.00 200.00 200.00
50 50 50 50	7-8 7-8 6-7 6-7	2 2 2 2	36 40	30 36		44 44	38 38		200.00 200.00 206.65 206.65
52 52 52 52 52	7 8–9 8-9 7–8	2 2 2	38 40 44 36	34	30	44 44 44 44	40	32	220.00 220.00 220.00 220.00
52 52 52 52 52	8–9 8–9 7–8 6–7	2 2 2 2	36 42 44 36			44 44 44 44			220.00 220.00 220.00 220.00
52 54 54 54	5-6 7 7-8 8-9	2	44 40 40 44	36	30	44 46 46 46	42	32	227.40 250.00 250.00 250.00
56 56 56 56	7 8-9 6-7 6-7	2 2 2	42 40	36 36 36	32	48 48	42 42 42	34	280.00 280.00 280.00 280.00
56 56 56 58	5-6 5-6 5-6 7	2 2 2	46	40 36 38	34	48 50	42 44	36	290.25 290.25 290.25 310.00
60 60 60	7 8-9 8-9 5-6	2 2 2	46 46 52 50	40	34	52 52 52 52 52	46	36	340.00 340.00 340.00 353.25
60 60 60 62	5–6 5–6 5–6 6	2 2 2 2	52 48	44 40 40	36	52 46 54	46 48	38	353.25 353.25 353.25 380.00
64 66 68 70 72	6 6 6 6		48 50 52 54 56	42 44 44 46 48	36 38 38 42 42	56 58 60 62 64	50 52 54 54 56	38 40 40 44 44	425.00 470.00 520.00 570.00 620.00

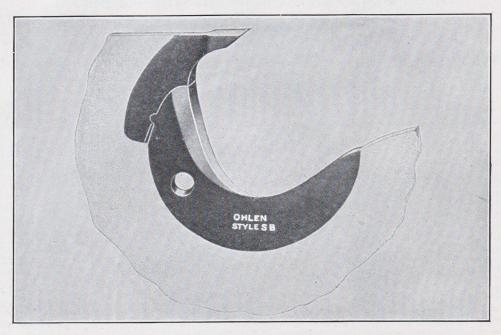
One extra set of teeth and two extra shanks given with each saw. One wrench given with each saw or set of saws.

See Discount Sheet

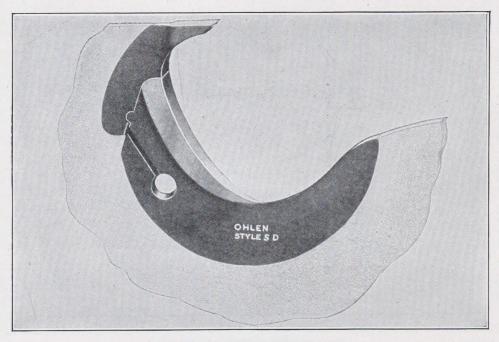


THE OHLEN-BISHOP COMPANY

Ohlen-Bishop Inserted Tooth Saws



Ohlen Style S. B. for Medium Tooth Saws, used for sawing Frozen Lumber



Ohlen Style S. D. for Coarse Tooth Saws



MASTER SAW MAKERS SINCE 1852

Ohlen-Bishop Inserted Tooth Saws

Ohlen-Bishop Simplified Price List

Uncertainty and unnecessary figuring eliminated

Figures in Heavy Type show Saws, specified by the majority of the trade on which prompt shipment can be made.

Style SB and SD

D:		77.1	Standard		eatest	Price
Diameter	Gauge	Hole	No. of Teeth		of Teeth	Price
			SB and SD	SB	SD	
				0		622 00
12	11	1	8	8		\$32.00
14	10	1	10	10		37.00
16	10	1	12	12		39.00
16	8	1	12	12		39.50
16	7	1	12	12		40.00
18	10	1	14	14		44.00
18	8	1	14	14		44.60
18	7	1	14	14		45.20
20	9	1	14	16		50.00
20	8	1	14	16		50.00
20	7	1	14	16		50.75
22	9	1	16	18		56.00
22	. 7	1	16	18		56.90
22	7	1	14	18		56.90
24	9	1	18	20		62.00
24	7	1	18	20		63.05
24	6	1	18	20		64.10
26	9	1	18	22		68.00
26	6	1	20	22		70.50
28	9	1	20	24		74.00
30	9	1	20	26	22	80.00
30	6	1	24	26	22	83.50
30	6	11/2	24	26	22	83.50
32	8	11/2	22	28	24	88.00
32	6	11/2	24	28	24	90.00
34	8	11/2	22	30	24	97.00
36	8	11/2	24	30	26	106.00
. 36	6	11/2	26	30	36	108.60
38	8	2	24	32	28	115.00

One extra set of teeth and two extra shanks given with each saw. One wrench given with each saw or set of saws.

See Discount Sheet





THE OHLEN-BISHOP COMPANY

Ohlen-Bishop Inserted Tooth Saws

Ohlen-Bishop Simplified Price List

Uncertainty and unnecessary figuring eliminated

Figures in Heavy Type show Saws, specified by the majority of the trade on which prompt shipment can be made.

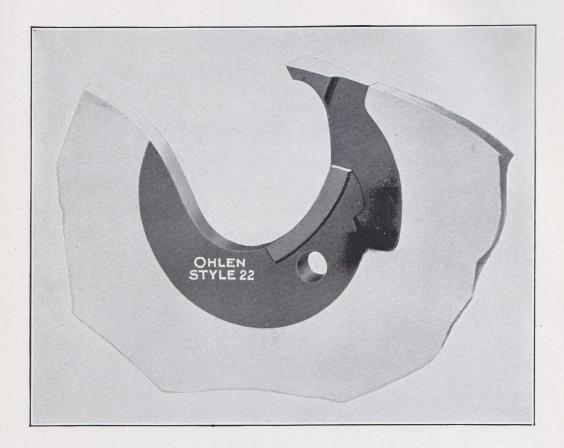
Styles SB and SD

Diameter	Gauge	Hole	Standard No. of Teeth	Grea No. of		Price
			SB and SD	SB	SD	
40	8	2	26	34	30	\$125.00
42	8	2	28	36	32	137.00
44	8-9		30	38	32	150.00
44	8	2 2	30	38	32	150.00
46	8	2	30	40	34	165.00
48	8	2	32	42	36	180.00
48	8–9	2	36	42	36	180.00
48	8-9	2	40	42	36	180.00
50	8	2	34	44	38	200.00
50	8-9	2	36	44	38	200.00
50	8-9	2	40	44	38	200.00
50	8–9	2	42	44	38	200.00
52	7	2	36	46	38	220.00
52	8-9	2	40	46	38	220.00
52	8-9	2	44	46	38	220.00
54	7	2	38	48	40	250.00
56	7	2	40	50	42	280.00
56	8-9	2	40	50	42	280.00
56	6-7	2	36		42	280.00
56	5–6	2	40		42	290.25
58	7	2	42	50	44	310.00
60	7	2	42	52	58	340.00
60	8-9	2	46	52	58	340.00
62	6	2	44	54	46	380.00
64	6	2	44	56	48	425.00
66	6	2	48	58	50	470.00
68	6	2	48	60	52	520.00
70	6	2 2	52	62	54	570.00
72	6	2	52	64	54	620.00

One extra set of teeth and two extra shanks given with each saw. One wrench given with each saw or set of saws.



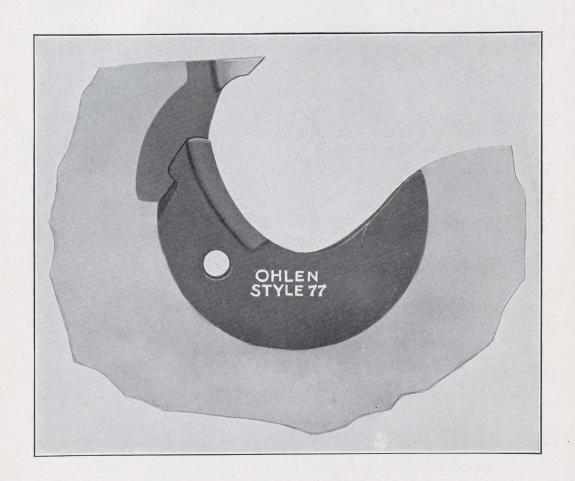
Ohlen-Bishop Inserted Tooth Saws



This Point and Shank, with an improved method of holding has developed the strongest Inserted Tooth Saw known to the trade. We have authentic records of this saw being driven direct to the mandrel by an 1100 Horse Power Engine cutting through the log at the rate of 11 feet per second. It will stand an unlimited feed and speed and is unquestioned in its claim to superiority as King of the Inserted Tooth Mill Saw class.



Ohlen-Bishop Inserted Tooth Saws





Ohlen-Bishop Inserted Tooth Saws

Ohlen-Bishop Simplified Price List

Uncertainty and unnecessary figuring eliminated Styles No. 22 and No. 77

Diameter	Gauge	Hole	No. o	ndard f Teeth nd No. 77	No. o	eatest of Teeth and No. 77	Price
							0 12 00
16	10	11/8	12		12		\$ 43.00
18	10	11/4	14		14		49.00
20	9	$1\frac{5}{16}$	14		16		55.00
22	9	$1\frac{5}{16}$	16	12	18	14	61.00
24	9	13/8	18	14	18	16	68.00
26	9	13/8	18	14	20	18	75.00
28	9	11/2	18	16	22	20	82.00
30	9	1½	20	16	24	20	90.00
32	8	15/8	22	18	26	22	100.00
34	8	15/8	22	20	28	24	110.00
36	8	15/8	24	20	30	24	120.00
38	8	15/8	24	22	32	26	130.00
40	8	2	26	24	34	28	140.00
42	8	2	28	26	36	30	150.00
44	8	2	30	26	38	30	165.00
46	8	2	32	28	40	32	180.00
48	8	2	34	30	42	34	200.00
50	8	2	36	32	44	36	220.00
52	7	2	38	34	44	36	245.00
54	7	2	40	36	46	38	275.00
56	7	2	42	36	48	40	310.00
58	7	2	44	38	50	40	340.00
60	7	2	46	40	52	42	375.00
62	6	2	48	42	54	44	420.00
64	6	2	48	42	56	46	470.00
66	6	2	50	44	58	46	520.00
68	6	2	52	44	60	48	575.00
70	6	2	54	46	62	50	630.00
72	6	2	56	52	64	56	685.00

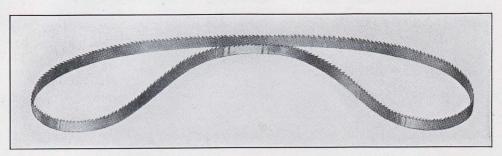
One extra set of teeth and two extra shanks given with each saw. One wrench given with each saw or set of saws.





THE OHLEN-BISHOP COMPANY

Ohlen Narrow Band Saws for Wood



Figures in Heavy Type show Saws, which are specified by the majority of the trade on which prompt shipment can be made.

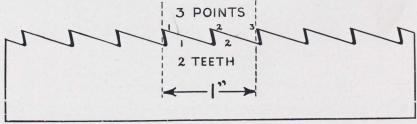
Width	Price		Points Per		Points Per	C	Points Per
In.	Ft.	Gauge	Inch	Gauge	Inch	Gauge	Inch
1/8	\$0.13	23	7				
$\frac{3}{16}$.13	22	7				
1/4	.13	21	6	21	5		
3/8	.14	21 or 22	5	21	6		
1/2	.15	21 or 22	5	21	4		
5/8	.16	21	4	21	5		
3/4	.18	21	4	20	4		
7/8	.20	20	31/2	20	4		
1	.22	20	4	20	3	20	31/2
11/8	.24	20	3				
11/4	.26	20	3	20	4		
13/8	.28	20	3	20	4		
11/2	.32	20	3				-
13/4	.38	20	3				

These prices are for saws set and filed but not brazed. If not wanted filed and set deduct 4 cents per foot from list.

II OIII IIDC							
Brazing	1/	to	1/3"	50	cents	per braze	
			7/8"	60	"	"	
			1¼"	.70	"	"	
			13/4"	80	"	"	

When ordering Narrow Band Saws always give the number of points per inch desired. There is always one more point per inch than there are teeth per inch.

The following illustration shows the difference between points and teeth.



See Discount Sheet



MASTER SAW MAKERS SINCE 1852

Ohlen-Bishop Nickel Alloy Wide Band Saws



Brazed Set and Sharpened

Width Inches	Gauge	Price	Width Inches	Gauge	Price
2	18 to 20	\$1.00 per foot	9	14 to 16	\$4.30 per foot
21/2	18 to 20	1.20 " "	10	14 to 16	4.80 " "
3	18 to 20	1.40 " "	11	14 to 16	5.40 " "
31/2	18 to 20	1.60 " "	12	13 to 15	6.00 " "
4	17 to 19	2.00 " "	13	13 to 15	7.20 " "
41/2	17 to 19	2.20 " "	14	13 to 15	8.40 " "
5	17 to 19	2.40 " "	15	12 to 14	10.20 " "
51/2	17 to 19	2.70 " "	16	12 to 14	12.00 " "
6	17 to 19	3.00 " "	17	12 to 14	16.80 " "
7	16 to 18	3.40 " "	18	12 to 14	21.60 " "
8	14 to 16	3.80 " "			

Saws of widths not listed above take price of next wider size listed.

Saws heavier than gauges listed above add 5% for each gauge heavier.

Saws one or two gauges thinner than list furnished without extra charge, if more than two gauges thinner add 5% for each gauge.

Double edge band Saws, add 10% to above list prices.

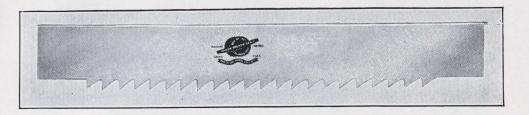
Toothed blanks same price as finished Saws.

Band Saw blanks are furnished ground and polished but are not warranted.



COMPANY OHLEN-BISHOP THE

Ohlen-Bishop Nickel Alloy Gang Saws



Price Per Foot

Width Inches	11 Gauge	12 Gauge	13 Gauge	14 Gauge	15 Gauge	16 Gauge
4			\$1.90	\$1.85	\$1.75	\$1.70
5			2.00	1.95	1.85	1.80
6			2.15	2.05	2.00	1.95
7			2.35	2.25	2.15	2.15
8	\$2.90	\$2.75	2.55	2.45	2.35	2.35
9	3.15	2.95	2.80	2.65	2.55	
10	3.40	3.20	3.05	2.90	2.75	
				His care in the language of th		

Above list covers Saws fitted but not with tabs or holes punched.

Add 10% to above list for Gang Saws with reversed teeth.

Saws of heavier gauges than listed above use drag saw list on next page.

Add 2c per hole Net for punching tab holes.

Tabbing Gang Saws

Tabbing Gang Saws, with solid bent tabs, or two plate tabs.

4-Hole\$1.00	6-Hole\$1.50
5-Hole 1.25	Round

Specifications Required When Ordering Gang Saws

Length of Saw Length over all including Tabs Distance between tabs Width of Saw Width at ends Distance from lower end of Saw to point of first tooth

Gauge or thickness Shape and space of teeth Number of teeth in Saw Length of tabs Width of tabs Location of tabs

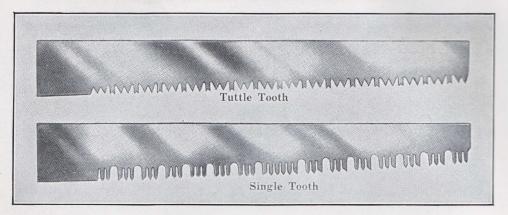
See Discount Sheet



SELL NOT ONLY SAWS-BUT WE

MASTER MAKERS SINCE 1852 SAW

Ohlen-Bishop Drag Saws



PRICE PER FOOT

Width		Thickness	
Width	10 Gauge	11 Gauge	12 Gauge
Tapered 6 in. butt, 4 in. point " 6 " " 5 " " " 8 " " 6 " "	\$2.00 2.20 2.40	\$1.80 .2.00 2.20	\$1.60 1.80 2.00

All saws fitted, ready for use. Tapered Drag Saws wider or thicker than above will be figured by the Mill, Mulay, and Drag Saw list, using the average width as the basis.

Drag Saws taper ground, add 5 per cent to the list for each gauge taper grinding.

Ohlen-Bishop Drag Saws of Equal Width



Width,			Price,	per Foot			
Inches	4 Gauge	5 Gauge	6 Gauge	7 Gauge	8 Gauge	9 Gauge	10 Gauge
8	\$6.00	\$5.60	\$5.00	\$4.40	\$4.00	\$3.60	\$3.40
9	6.40	6.00	5.40	4.80	4.40	4.00	3.60
10	7.00	6.40	5.80	5.20	4.80	4.40	4.00
11	7.60	7.00	6.40	5.80	5.40	4.80	4.40
12	8.40	7.80	7.00	6.40	6.00	5.40	4.80
14	9.60	9.00	8.20	7.60	7.00	6.40	5.80
16	11.20	10.60	9.60	8.80	8.20	7.60	7.00

All Saws fitted, ready for use.

Above prices are for saws with Plain, Mill, Tuttle, or Lance tooth. Saws with special pattern teeth,

In ordering these saws, please be sure to specify them by name, also give complete specifications in regard to gauge, length and width. Send template showing position of the holes for attaching the blade to the machine.

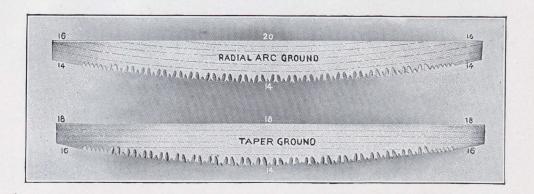
See Discount Sheet

SERVICE AND SATISFACTION SAW



THE OHLEN-BISHOP COMPANY

Ohlen-Bishop Radial Arc Ground Cross Cut Saws



OHLEN-BISHOP Crosscut Saws are made and warranted with full knowledge of the unusually severe service that they are expected to render with the minimum of care. They are used indiscriminately in hard and soft, green and seasoned timber.

Ohlen special formula CHROME NICKEL ALLOY STEEL provides the toughness and hardness that such service demands. Any but the toughest steel would be too brittle for crosscut use. Ohlen Crosscuts hold their edge and set, cut fast, clear quickly, and are refitted readily. Evenness of temper and grain throughout the blade are secured by exact temperature control in hardening and tempering.

All of OHLEN-BISHOP high grade crosscut saws are "Radial Arc Ground", that is ground in a line parallel to the cutting-edge of the saw. This gives a saw an even thickness throughout the tooth edge and a gradual taper from the tooth to the back. Because of this our crosscut saws have less set in the teeth and less kerf to cut. The real advantage is that there is no binding at all in the kerf, enabling the operator of the saw to work more easily and accomplish more work.

CHROME NICKEL ALLOY STEEL, special accuracy and trueness in every detail, added to our surpassing RADIAL ARC GRINDING, makes possible the OHLEN-BISHOP warranty for unequalled fast-cutting, uniformity, toughness, and edge-holding qualities.



Ohlen-Bishop Radial Arc Ground Cross Cut Saws

Chrome Nickel Alloy Steel Heavy Type denotes Standard Sizes.



No. 13 Tuttle Tooth Saw. Two Cutting Teeth to each Raker.

Length, feet	r.	51%	9	61%
Weight each, Ibs.	517	61%	71%	2100
List Price, each.	\$7.60	\$9.20	\$10.40	\$12.40

Saws 6 feet and over are 14 x 20 gauge. Under 6 feet are 15 x 20 gauge.



No. 22. Perforated Lance Tooth Saw. Four Cutting Teeth to each Raker.

|--|

Saws 6 feet and over are 14 x 20 gauge. Under 6 feet are 15 x 20 gauge. Dimensions of No. 13 and No. 22 in 6 foot lengths are width at center, 7", width at ends 33%".



Ohlen-Bishop Radial Arc Ground Cross Cut Saws Chrome Nickel Alloy Steel Heavy Type denotes Standard Sizes.



No. 316. Perforated Lance Tooth Saw. Two Cutting Teeth to each Raker.

0,72	634	\$12.40	
0	9	\$10.40	
5/2	514	\$9.20	000
Length, teet.	Weight each, lbs.	List Price, each.	

Saws 6 feet and over are 14 x 20 gauge. Under 6 feet are 15 x 20 gauge.



No. 324. Perforated Lance Tooth Saw. Four Cutting Teeth to each Raker.

Length, feet	2	51/2	9	61/2	7	
Weight each, Ibs.	41/2	514	9	63,4	71/2	
List Price, each.	87.60	\$9.20	\$10.40	\$12.40	\$13.60	

71½ 814 **\$16.00**

Saws 6 feet and over are 14 x 20 gauge. Under 6 feet are 15 x 20 gauge.



No. 326. Tuttle Tooth Saw. Two Cutting Teeth to each Raker.

Length, teet. Weight each, lbs. List Price, each.	\$9.20	\$10.40	634 634 \$12.40
Saws 6 feet and over are 14 x 20 gauge. Under 6 feet are Dimensions of No. 316, No. 324 and No. 326 in 6 foot leng	5 x 20 gauge. the are, width at center	· 6", width at ends 33%".	



Ohlen-Bishop Felling Saws Radial Arc Ground Chrome Nickel Alloy Steel

Heavy Type denotes Standard Sizes.



No. 113. Tuttle Tooth Saw. Two Cutting Teeth to each Raker.

9	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$10.40
51%	31.	\$9.20
No.	41/4	\$7.60
ngth, teet	ight each, lbs	t Frice, each

Under 6 feet are 15 x 20 gauge. Saws 6 feet and over are 14 x 20 gauge.



No. 133. Perforated Lance Tooth Saw. Four Cutting Teeth to each Raker.

angth, feet	5 51/2	9	19
eignt each, lbsst Price, each.	\$7.60 \$9.20	\$10.40	8.0

Saws 6 feet and over are 14 x 20 gauge. Under 6 feet are 15 x 20 gauge.

Dimensions of No. 113 and No. 133 in 6 foot lengths are, width at center 51/2", width at ends 31/4".



Ohlen-Bishop Felling Saws Radial Arc Ground Chrome Nickel Alloy Steel

Heavy Type denotes Standard Sizes.



No. 315. Tuttle Tooth Saw. Two Cutting Teeth to each Raker.

gth, feet	w.	51/2	
ight each, Ibs.	41/2	ıv	
Price, each	\$7.60	\$9.20	S



No. 325. Perforated Lance Tooth Saw. Four Cutting Teeth to each Raker.

ength, feet	47.2	41/2	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	
ist Price, each	\$6.80	87.60	\$9.20	\$10

Dimensions of No. 315 and No. 325 in 6 foot lengths are 14 x 17 gauge, width at center $41_2''$, width at ends $31_4''$.



Ohlen-Bishop Radial Arc Ground Cross Cut Saws Pacific Coast Patterns

Chrome Nickel Alloy Steel

Heavy Type denotes Standard Sizes.



Master Cutter. Bucking Pattern. Same Pattern as No. 503—Crucible Alloy Steel Same as 251 except Perforated Tooth. No. 503. No. 251. No. 251P.

\$16.00 \$18.00 12.00

Nos. 503, 251 and 251P Saws 6 feet and over 13 x 15 x 17 gauge. Under 6 feet 14 x 16 x 17 gauge.

THE YOUR YOUR YOUR XUREX THE XUREX N9513 -

Master Cutter. Falling Pattern. Same Pattern as No. 513—Crucible Alloy Steel. 513. 252. So.

Length, feet.	ν ιν /1		6 71%	8 01/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2	91%	101/2	1111/2	1212	131/2	24	151/2
ist Price, No. 513	\$12.50	\$14.25	\$16.00	\$18.00	\$20.00	\$22.00	\$24.25	\$26.50	19.00	\$31.50	\$34.25

Nos. 513, 252 Saws 6 feet and over 13 x 15 x 17 gauge. Under 6 feet 14 x 16 x 17 gauge.



Ohlen-Bishop Radial Arc Ground Cross Cut Saws

Pacific Coast Pattern Chrome Nickel Alloy Steel Heavy Type denotes Standard Sizes.



No. 520. Lance Tooth			No. 520A.	Same Pattern a	s No. 520-Crue	Same Pattern as No. 520—Crucible Alloy Steel
Length, feet	\$ 6½ 6½ \$12.50 7.12	\$14.25 7.92	81/2 \$16.00 8.64	\$12 912 \$18.00 9.35	\$20.00 \$20.00 10.00	\$22.00 \$22.00 \$10.72
Nos. 520 and 520-A Saws 6 feet and c	over 13 x 15 x 1	17 gauge. Un	Under 6 feet 14 x 16 x17 gauge	k17 gauge.		

Nº 541

51/2 \$10.85 No. 541 No. 541 Saws 6 feet and over 14 x 16 x 18 gauge. Weight each, lbs... List Price, each....

61/2 61/4 **\$12.75**



		No. 363. T	No. 363. Tuttle Tooth			
Length, feet. Weight, Ibs. List Price, each.	5 61/2 \$7.00	\$7.50	81/2 \$8.00	61/2 91/2 \$8.75	7 101/2 \$9.50	\$111 \$10.2
No. 363 Saws 6 feet and over 13 x 15 x 17 gauge. U	15 x 17 gauge.	nder 6 fe	et 14 x 16 x 17 gauge.			

30/00/2

Heavy Type denotes Standard Sizes.

14 x 16 Gauge Two Cutting Teeth to each Raker. Tuttle Tooth Saw. No. 330.

1 1	2 23	71%
each, IDS.	\$5.76	\$6.24

14 x 18 Gauge No. 331. Tuttle Tooth Saw. Two Cutting Teeth to each Raker.

h, teet	200
it each, lbs.	4%
rice each	\$6.00

Tuttle Tooth Saw. Two Cutting Teeth to each Raker. 14 x 19 Gauge. No. 332.

ngth, feet		275	10
eight each, lbs	474	274	0 10
et Price each	00.20	97.76	D.14

14 x 20 Gauge. Tuttle Tooth Saw. Two Cutting Teeth to each Raker. No. 3321/2.

ngth, feet.	5	0 0
eight each, Ibs.	2000	000
at Price each	61.15	90.

Dimensions of No. 330, No. 331, No. 332, and No. 3321/2 in 6 foot lengths are: width at center 7", width at ends 31/4".



Ohlen-Bishop Wide Cross Cut Saws Taper Ground

Crucible Alloy Steel

Heavy Type denotes Standard Sizes.



No. 225. Perforated Lance Tooth Saw. Four Cutting Teeth to each Raker. 14 x 18 Gauge. No. 225N.P. Lance Tooth Saw Not Perforated. Four Cutting Teeth to each Raker. 14 x 18 Gauge.

61/2 81/4 \$9.92		6½2 8 810.60
6\$	Gauge.	\$1
6 7 ¹ / ₂ \$9.12	ch Raker. 14 x 19	89.80
\$3,2 5,3,4 \$8.40	Perforated Lance Tooth Saw. Four Cutting Teeth to each Raker. 14 x 19 Gauge.	\$17.2 \$1.2 \$9.00
5 4 ³ / ₄ \$7.60	ooth Saw. Fo	\$8,15
os. 225 and 225N. P.	Perforated Lance To	
Length, feet. Weight each, lbs. List Price, each—Nos. 225 a	No. 225A.	Length, feet



14 x 18 Gauge Common or Tenon Tooth Saw. No. 338.

Dimensions of No. 225, No. 225A, No. 337 and No. 338 in 6 foot lengths are: width at center 7", width at ends $3 \mathcal{Y}_*^n$.

See Discount_Sheet



Ohlen-Bishop Wide Cross Cut Saws Taper Ground

Crucible Alloy Steel

Heavy Type denotes Standard Sizes.



No. 334. American Tooth Saw. 14 x 18 Gauge

Length, feet	× 6	57.2	711/
weignt each, ibs	\$6.56	\$7.20	\$7.84

No. 333. American Tooth Saw. 14 x 16 Gauge

feet	w.	51/2/2	
each	4%4	5%	
ce. each	\$6.25	\$6.75	-

Dimensions of No. 334 and No. 333 in 6 foot lengths are: width at center 7", width at ends 3/4"



Heavy Type denotes Standard Sizes.



Two Cutting Teeth to each Raker. 14 x 16 Gauge No. 221. Diamond Tooth Saw.

DS.	teet	ı, ı	5/2	9
	each, Ibs.	000	9 78	27

No. 2222. Diamond Tooth Saw. Two Cutting Teeth to each Raker. 14 x 18 Gauge. No. 222A. Diamond Tooth Saw. Two Cutting Teeth to each Raker. 14 x 19 Gauge.

6 714 \$7.90
51/2 53/4 \$7.30
5 434 \$6.60
Length, feet

Dimensions of No. 221, No. 222 and No. 222A in 6 foot lengths are: width at center 7", width at ends $3\lambda_4^N$ ".



Two Cutting Teeth to each Raker. 14 x 18 Gauge Diamond Tooth Saw. No. 223.

Length, leet Weight each, lbs.	33%	4 5/2	51/2
List Price, each.	\$6.60	\$7.30	87.90

Dimensions of No. 223 in 6 foot lengths are: width at center 558'', width at ends 3''.



Ohlen-Bishop Hollow Back Cross Cut Saws Crucible Alloy Steel

Heavy Type denotes Standard Sizes.

THE TAXABLE PROPERTY OF THE PROPERTY OF THE PARTY OF THE Nº 313

31/4 inches Wide Two Cutting Teeth to each Raker. Champion Tooth Saw. No. 313.

\$3.10 \$3.50 \$3.85

No. 379. Tuttle Tooth Saw. 31/4 inches Wide Two Cutting Teeth to each Raker.

41/2 5	
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15

THE TRUTH THE TR

No. 384. Diamond Tooth Saw. 31/4 inches Wide Two Cutting Teeth to each Raker,

83.35	
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Ohlen-Bishop Hollow Back Cross Cut Saws

Crucible Alloy Steel

Heavy Type denotes Standard Sizes.



No. 385. American Tooth Saw. 31/4 inches Wide

ı, reet	\$2.09	\$2.32	\$2.56	\$2.79
---------	--------	--------	--------	--------



No. 386. Perforated Lance Tooth Saw. 31/4 inches Wide

List Price, each		\$3.70		\$4.10		\$4.60	\$4.90
No.	387.	No. 387. Perforated Lance Tooth Saw. 334 inches Wide.	Tooth	Saw. 334	inches W	ide.	
Length, feet		\$3.76		\$4.24		\$1.2 \$4.64	\$5.12

No. 388. Perforated Lance Tooth Saw. 334 inches Wide. 14 x 16 Gauge

ch 43/2	5 84.56	\$5.04	\$5.44
---------	---------	--------	--------



HLEN-BISHOP ONE MAN SAWS are manufactured with the same care and attention to the holding nature. Accurate and uniform grinding, filing and setting insure a fast and easy cutting well seasoned hardwood handles with varnished edges and side sanded. Handles are fastened to the Each Saw is warranted to be free from slightest details which characterizes all Ohlen-Bishop products. The finest quality Saw Steel and our exclusive heat-treating processes give these Saws an exceptionally durable and edgeolade which will not bind in the kerf. Saws illustrated on the following pages are equipped with plade with two brass saw screws and one brass medallion. any defect in material or workmanship.

Ohlen-Bishop Radial Arc Ground One Man Cross Cut Saws

Chrome Nickel Alloy Steel

Heavy Type denotes Standard Sizes.



No. 223. Perforated Lance Tooth Saw. Four Cutting Teeth to each Raker. Skew Back.

angth, feet.	64 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	52 24 36	88 8 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
S. L. I.Ce. Galcii	OF.OD	00:10	04.04

A Radial Arc Ground Lance Tooth One Man Saw accurately tapered from cutting edge to back. An even gauge all along the tooth edge. Double Horn Handle with large opening, enabling operator to use glove in winter.

See Discount Sheet

SAWS ONLER DISHOD SAWS
ONLER DISHOD SAWS
MACHINE CHAPTER KNIVES
MACHINE CHAPTER SAW MARKES SINCE DESTREAM MARKES DESTREAM MARKES SINCE DESTREAM MARKES SINCE DESTREAM MARKES DESTREAM

Heavy Type denotes Standard Sizes.



No. 111. Tuttle Tooth Saw. Two Cutting Teeth to each Raker. Straight Back

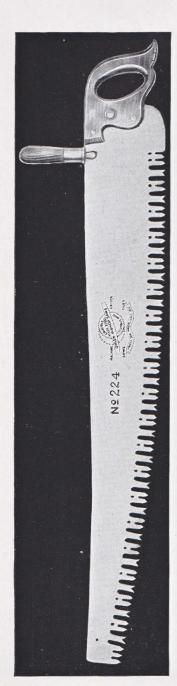
Length, feet	3	31/2	4	41%	5
Weight each, Ibs.	314	4	434	51/2	61/4
List Price, each	\$3.60	\$4.32	\$4.96	\$5.60	\$6.24



No. 112. Lance Tooth Saw. Two Cutting Teeth to each Raker. Skew Back

ww re

Heavy Type denotes Standard Sizes



gth, feetght each, lbs	3 3 \$5.20	31/2	4 4 1/2 \$6.80	41/2 51/4 \$7.60
------------------------	------------------	------	-------------------	------------------------



No. 237. Perforated Lance Tooth Saw. Four Cutting Teeth to each Raker. Skew Back,

100: 201: I CITOTAICE DAILE TOUR SAW: FOUR CALIFIED FOUR IN CACH MARKET	TOOTH Daw.	roat datting	וברווו נס	cacii	Mane.
anoth foot	31%			-	11
Jensen, reet	2/2				1
Weight each the	33%	4	1%		51
	4/0		77		1
ist Price each	00.95	9	-X		18

See Discount Sheet

SATISFACTION SAWSERVICE AND

Heavy Type denotes Standard Sizes.



No. 238. Lance Tooth Saw not Perforated. Four Cutting Teeth to each Raker. Skew Back.

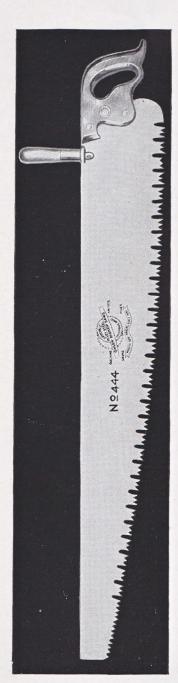
ength, feet.	31/2	4 4 1/2	41.2 21.2	0 21
t Price, each	\$6.05	\$6.85	\$7.55	\$8.45



No. 392. Perforated Lance Tooth Saw. Four Cutting Teeth to each Raker. Straight Back.

3.14 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	3½ 4 4 4.96 85.60	\$6.32	6½ \$7.04
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Heavy Type denotes Standard Sizes.



110. 111.	Triviality tooks buttle buttle buch)		
, feet t each. Ibs.	31%	31/2	4 4 %	41/2
ice, each	\$4.00	\$4.72	\$5.44	\$6.15



No. 777. Common or Tenon Tooth Saw. Straight Back

ı, feet.	3	31/2	
t each, 1bs.	31/4	4	
rice, each	\$3.60	\$4.32	



Australian Pattern Cross Cut Saws Radial Arc Ground



No. 18. Chrome Nickel Alloy Steel. Tasmanian Pattern with filing gullet. No. 118. Crucible Alloy Steel. Tasmanian Pattern with filing gullet.

Veight each, lbs.	45 47 71 71	4 72 4	4 ³ / ₄	\$9.08 12.2 40.08	714 \$10.38	\$12.23	91/2 \$13.31	1012 \$15.84	\$17.38
ist Price—No. 118	4.98	5.66	6.26	6.94	7.52	8.12	8.80	9.38	10.06



\$17.38 10.18 No. 119. Crucible Alloy Steel. Jarrah Pattern 71/2 101/2 \$15.84 9.52 \$13.31 8.85 6 714 \$10.38 7.60 \$172 \$174 \$9.08 7.02 Chrome Nickel Alloy Steel. Jarrah Pattern 41/2 4 \$6.92 5.68 31/4 \$6.15 5.09 Weight each, lbs. List Price—No. 19... List Price—No. 119... No. 19.



Z	No. 26.	Chrome	Nickel	Alloy	Nickel Alloy Steel.	Peg	Tooth	I	10. 1	No. 126.	Crucible	Alloy	Steel.	Peg T	Tooth	
Length, fee Weight ead List Price- List Price-	ch, lbsNo.	26. 26.		4 31/4 \$6.15 4.51	\$6.92 \$6.92 \$.09	2 20	% 69 11	\$1/2 51/4 \$9.08 6.25	41	510.38 6.78	61/2 81/2 \$12.23 7.37	**************************************	91.2	\$15.84 8.49		8 111 ¹ / ₂ \$17.38 9.03
Austra	lian Pa	Australian Pattern Saws 6 feet and over, 14 x 10 x 20 gauge	o teet an	d over,	14 x 10	8 07 X	0	Under o leet 13 x 10 x 20	X	0 x 70	gange.					



Australian Pattern Cross Cut Saws Radial Arc Ground



Chrome Nickel Alloy Steel. Tasmanian Pattern without filing gullet Crucible Alloy Steel. Tasmanian Pattern without filing gullet 28. 128. No.

ngth, feet	4	41/2	S	51/2	9	61/2	7	71%	∞
Veight each, 1bs.	314	4	434	514	714	81%	91%	101/2	111%
.ist Price—No. 28	\$6.15	\$6.92	\$7.69	\$0.08	\$10.38	\$12.23	\$13.31	\$15.84	\$17.38
.ist Price—No. 128.	4.98	5.66	6.26	6.94	7.52	8.12	8.80	9.38	10.06

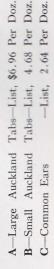


Australian Pattern Chrome Nickel Alloy Steel. Australian Pa Crucible Alloy Steel. Australian Pattern No. 500. No. 1500.

Length, feet. Weight each, lbs.	314	4 4 7 2	5 4 4 8	512	717	8 61/2/	91%	101/2	
List Price—No. 500 List Price—No. 1500	\$6.15	\$6.92 5.68	\$7.69	\$9.08	\$10.38	\$12.23 8.26	\$13.31 8.85	\$15.84 9.52	₩

Australian Pattern Saws 6 feet and over, 14 x 16 x 20 gauge. Under 6 feet, 15 x 16 x 20 gauge.





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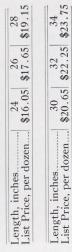


Pond Ice Saw No. 3



Width of	Width at			LISI	r price, W	LIST PRICE, WITHOUT HANDLE	NDLE		
Butt	Point	Thickness	3 feet	3½ feet	4 feet	4½ feet	5 feet	5½ feet	6 feet
8 inch 8 " 7 "	6 inch 6 " 5 "	10 gauge 11 "	\$4.60 4.35 4.15	\$5.40 4.95 4.85	\$6.20 5.80 5.45	\$6.90 6.55 6.00	\$7.65 7.15 6.90	\$8.45 7.95 7.60	\$9.20 8.75 8.20
2 "	s s	11 "	3.45	4.50	5.20	5.90	6.55	7.25	7.75
		Tiller I	Handles, con	Handles, complete, as shown	n above	\$2.30	30 each		

Hand Ice Saw No. 2





Malleable Iron Handle

List Price, per dozen \$33	\$33.20	\$34.
	00	31
Length, inches	\$36 70	\$38





Ohlen-Bishop Machine Knives

ON the following pages are illustrated a few of the principle styles of machine knives. Due to the various shapes, sizes and tempers a full description is not given but we can furnish any special knife desired and any temper required.

Ohlen-Bishop Knives are made from the best selected material ground to the proper gauge, tempered to the right degree and finely finished; the undivided efforts in all stages of their production, combine to maintain their reputation for **Superior Quality**.

We will be pleased to quote prices on any pattern or specification required.

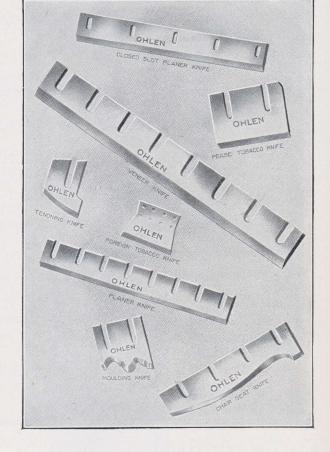


THE OHLEN-BISHOP COMPANY

Ohlen-Bishop Machine Knives

For Planing, Moulding and Veneer Mills

AREFUL attention should characterize every operation in the manufacture of Planing, Moulding and Tenoning Knives. To produce satisfactory results, save money in grinding and allow the proper running of the machine on which they are used, knives in sets must conform in every respect, be the same thickness and weight and be evenly balanced. The entire length of cutting edge should have both a uniform temper and the exact degree of hardness best adapted to the wood for which it is desired. The size of the bevel, another important feature, should be governed by the thickness, and work required of the knife. Ohlen-Bishop knives have perfect welds thus making a smooth bevel without cracks or seams between iron and steel and eliminating the wedging of shavings.



Veneer manufacturers understand perfectly how imperative it is to

secure Veneer Knives, finely tempered, accurately ground and free from imperfections. Owing to the delicate nature of veneer, and the absolutely clear surface required, the knives should be very sharp, cut clean and even, and hold their edges.

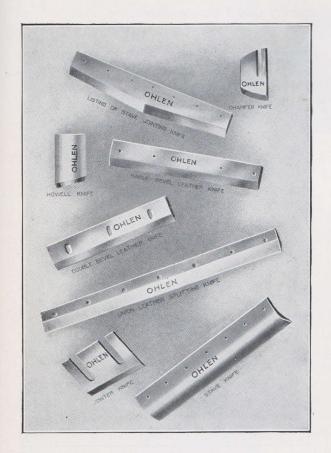
If the users of Veneer Knives could see the careful methods employed by us on knives of this kind they would soon realize why Ohlen-Bishop knives produce such smooth and perfect veneer.

Write for Prices



Ohlen-Bishop Machine Knives

For Coopers' and Barrel Manufacturers, Tanneries and Leather Splitters



NIVES used in the production of staves, barrels and kegs are taxed to the utmost, owing to the peculiar method of manufacture, and users of Stave, Listing, Chamfer and other knives for this purpose know the importance of securing Knives which are perfect in every respect. They know too well how often their output is greatly reduced—because of a poor Knife. They realize the time and money lost in grinding and repairs when poor Knives are used on their machines.

After trying other makes and meeting with the difficulties to which Knives of this class are subjected, manufacturers invariably find success in Ohlen-Bishop Knives.

Without a question, the most difficult knives to make are used by leather manufacturers. They know from experience how hard it is to secure a PERFECT LEATHER KNIFE, combining the edge of a razor with the greatest strength and

efficiency. They realize the saving in time, patience and money which a good knife means, and prize it above all other classes of machinery.

Users of Leather Knives know that Knives of this description must be made accurately in order to turn out high grade leather products. If the knives are at fault many costly skins may be spoiled at a great loss to the manufacturer. Because of this fact we have made our Leather Knives with infinite care and we believe that no other make of Knife can compare with the edge-holding quality so noticeable in Ohlen-Bishop Leather Knives.

Write for Prices



THE OHLEN-BISHOP COMPANY

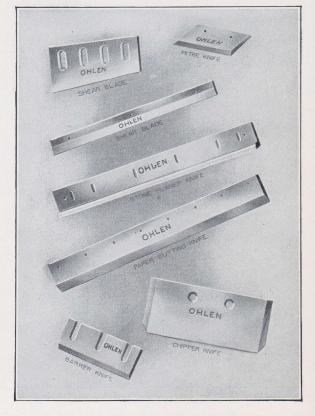
Ohlen-Bishop Machine Knives

For Paper Manufacturers and Lithographers

PAPER manufacturers, printers, bookbinders, lithographers and other users of Paper Knives appreciate from experience the importance of buying knives which can be used on the finest work, without danger of leaving ridges and uneven edges on their catalogs, booklets, and circulars. Knives which cut faster, easier and last longer, mean dollars saved to them in grinding and costs. In addition to this, new customers are more easily secured and old accounts are held.

Because Ohlen-Bishop Paper Knives cut clean and even, hold their edge against the toughest stock, require less grinding and honing and last longer than other makes, they have been recognized as a necessary requirement by many manufacturers.

The demand for our Shear Blades is rapidly increasing, because we realize the severe strain to which



Shear Blades are subjected and have maintained the policy that the best is always the cheapest. Steel against steel, the Shear Blade is expected to do it's work, from the thin sheet of tin to the heaviest bars of steel. It must always do its duty. Seeing bars of steel cut smooth and even without the slightest effect on the Shear Blade certainly seems wonderful, and proves that the highest in quality always pays.

Write for Prices



MASTER SAW MAKERS SINCE 1852

Ohlen-Bishop Machine Knives

High Speed Planer Knives

HLEN-BISHOP High Speed Planer Knives are made from a high quality tungsten steel with a peculiar evenness of grain and temper, which grinds easily and holds its edge. Our grinding is done with utmost care on magnetic chucks, in order that these knives, which are run in sets, shall conform in every respect, be the same thickness and weight, and be evenly balanced. These qualifications, which are



absolutely essential in a high speed knife, make our knives stand up longer and consequently produce a great saving in producing good lumber.

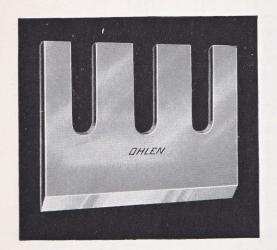
We recommend the following cylinder speeds for High Speed Knives running under high speed conditions. These feeds are based on getting eight to ten knife marks per inch on the lumber.

3000 R. P. M. for a four knife cylinder with a feed of 100 to 125 feet per minute.

3000 R. P. M. for a six knife cylinder with a feed of 150 to 190 feet per minute.

2700 R. P. M. for an eight knife cylinder with a feed of 180 to 225 feet per minute.

Hog Knives



Ohlen-Bishop Hog Knives are made especially adapted for the hard usage that a knife of this type receives. We furnish these knives carefully tempered and balanced, either with or without the corrugations across the slots. If a real high quality Hog Knife is desired, no mistake will be made in ordering a set of OHLEN-BISHOP Hog Knives. They wear well because they are made well.

Write for Prices



Ordering Knives

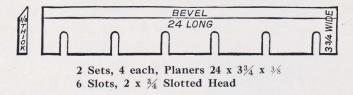
Knife. The term KNIFE when used in connection with Machine Knives means one which has a temper, and is ground sharp ready for use.

Blank. A BLANK is untempered and ordered for the purpose of making moulding and other special cutters of odd shapes. These are sometimes called Sticker Blanks.

Bit Cutters. Knives under six inches long are sometimes called Bits, and small shape Knives are frequently called cutters.

Planer Knife Patterns. The sketch below illustrates the proper method of furnishing Planer Knife Patterns, and a similar drawing of all knives should be sent with order. Lay the old knife, bevel up, on strong manilla paper; carefully mark all around with sharp pencil, showing the slots in their exact location, and whether knives are wanted square back or bevel back. Mark on the pattern the length (meaning the cutting edge) the width (from cutting edge to back of knife) and thickness. This is very important, as the width is frequently greater than length, viz., in short knives. Also be sure and give the diameter of bolts.

Knives in Sets. State how many knives, of each size, are wanted, and the number of knives to each set. We stamp the sets to show which knives are balanced together.



Slotted Head Planer Knives. Planer Knives for use on slotted head (where bolts are not stationary) do not require patterns, but, to avoid any uncertainty, be sure to state on your order that knives are for slotted head. Be particular to give length, width and thickness of knife; also depth and number of slots in each knife and diameter of bolts.

Sizes of Slots. The size of the slots should be one-sixteenth of an inch larger than the diameter of the bolt used to hold the knife to the machine. Planer Knife slots are usually cut a little over half the distance from back of the knife.

Temper. We temper knives for all classes of wood. If you are undecided about the temper, advise us as to the class of work required, and the kind of lumber and we will deter-



MASTER SAW MAKERS SINCE 1852

mine this point. Temper may be indicated as follows: Soft—or easy filing temper. Medium—This covers the ordinary requirements when knives are usually ground and dressed with a file. Hard—The temper generally used in furniture factories when hardwood is used, and is described as "slow filing" or "no file will barely touch them." Very Hard—or for grinding only.

Moulding Cutters. When ordering moulding cutters, furnish patterns or specify from "The Universal Moulding Book."

Odd Shapes. It is safest when ordering odd shapes, to mail an old worn knife with the order for information. Be sure to give exact width new knives are desired.

Milled Knives. Samples or accurate drawings should accompany all orders for Milled Knives.

Veneer Knives. Furnish patterns with veneer knife orders, giving length, width, thickness, depth and width of slots, length of bevel, name of machine and manufacturer.

Paper Knife Patterns. Paper Knife patterns should be taken on good manilla paper, rolled for mailing (not folded). Special care should be exercised in locating the holes and giving the exact width and thickness of the knife.

Send Old Knife if Possible. If convenient, it is safest for customer to send us his old Knife, which with the desired width of the new knife, forms the best pattern possible. The expense of shipping is more than offset by the accuracy in dimensions, which we can then furnish.

Stave and Listing Knives. Be sure to give length and width when ordering Stave or Stave Jointer (listing) knives; also name of machine and manufacturer.

High Speed Woodworking Knives. We are prepared to furnish High Speed Woodworking Knives of the best quality. They hold their cutting edges and do an immense amount of work without regrinding. When ordering specify length, width and thickness, number of knives to each set, whether single or double bevel is desired, and the exact angle same is required.

Retempering Knives Not Our Make. While we do not recommend the repairing and retempering of old knives, work of this class will be given our best attention. We however, wish to warn the trade that we do not retemper knives of other makes except at the owner's risk.



Proper Care and Grinding of Knives

PROPER treatment and grinding are two of the most important points to the user of Machine Knives, and his satisfaction and success largely depends on whether or not his knives are properly ground, honed and cared for. It is safe to say that ninety percent of the difficulties experienced with knives of any kind, come from the man in the mill who cares for them. We quote here the words of a prominent user of Machine Knives.

"The manufacturer of Knives stands in a relation to his customer different from that of any other manufacturer towards the consumer of his product in that he is so frequently called upon to make good the errors that arise through carelessness or other causes in the handling, treatment or use of the knife he furnishes.

Blame Wrongly Placed. The incorrect position so often taken with reference to knives that have gone wrong can nearly always be traced directly to the pride taken by the man who grinds the knives on his reputation for doing good work. While the pride is in itself a thing to be commended and fostered it should not blind either the man himself or his superiors to his mere fallacies or errors. It is an injustice to his employer as well as to the manufacturer of the knife."

Have Best Man in Charge of Grinding. Therefore, it is plain that the best man obtainable should be secured to take charge of the grinding and honing and to see that the knives receive proper treatment. It means a saving of time, labor and money, and the bringing about of better results.

Keep Sharp Knives Always Ready. There is no special secret connected with keeping knives in order, probably the best tip is contained in the injunction to have plenty of knives on hand, so that there may never be an accident, or occasion arise, but that there are sharp knives ready to put on the machine. This will prevent the man in charge of grinding or filing from being caught with a rush job, and will enable him to take pains in putting every knife in order.

It is bad policy to even rush the job of putting a knife into a machine, but when it comes to rushing the job of grinding, it is simply ruinous because a **little rushing** with the grinder, may burn the edge or draw the temper, and the result is damage in excess of the whole day's work.

Grind Knives Slowly. Knives must be ground very slowly and carefully; even the grinders should be run slower than most of them are, and the cut must be made very light so that it will not generate heat. The bevels of most knives are tapered very slender and a little too much pressure will spoil the cutting edge, besides the heat generated may cause some expansion of the blade, so that the grinding will not be perfectly true.

Use Soft Stone and Emery Wheels. It is probably safe to assert that half of the success of grinding knives is in the selection and use of proper grinding wheels. This refers more particularly to the material entering the wheel and the method of bonding, rather than the design and shape of the wheel, though the latter has some effect. It is an acknowledged fact that very good success can be obtained by the use of the commonly called grindstones, especially if they are very soft. However, as a large percentage of



MASTER SAW MAKERS SINCE 1852

grinding is done with emery, carborundum or abrasive wheels, we will devote a little space to their influence on the cutting efficiency of a knife. Of late years, there has, naturally, been new wrinkles, alterations and additions to the general process of making wheels, but too much space would be required to go into details. It may be said, however, that almost any combination of material and bonding can be had. Different manufacturers of wheels will produce specific arguments in favor of their own material, but in the meantime, we must not forget this point—that **what the knife-grinder needs is a soft wheel,** one as soft as practical to do the work. There is less danger of heating and burning the cutting edge with a soft and free-cutting wheel which does the work easier and with no harm to the knife, while hard wheels generally glaze, cut hard and burn the edge. Some expert knife grinders make a practice of getting several new wheels and trying out each one to demonstrate its qualities. If one proves unusually soft and free-cutting, a record of grit and bond is taken for specification on all orders for new wheels.

Do Not Use Small Grinding Wheels. When grinding Planer Knives and various small cutters, straight wheels can be made use of, as well as cup wheels, but for Veneer, Leather, Paper and other knives with long bevels, the straight wheel, unless unusually large, will give too much concave to the bevel, consequently it is better to use the cup wheel.

Use Plenty of Water. The majority of grinding machines are provided with a water attachment; and knife-grinders, to prevent over-heating, should keep the knife and wheel cool with a good supply of water. Do not allow oil or grease to get into the water attachment, and from there to the grinding wheel. After oil has once reached the wheel, it is next to impossible to keep the face from glazing, which will quickly heat and burn the cutting edges.

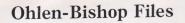
Use the Emery Wheel Dresser. Frequent recourse to the emery wheel dresser is the only remedy. This is very important and should not be overlooked.

Grinding Stave Knives. Stave Knives, when leaving our plant, are always ground to the proper shape. Great care should be taken regrinding, particularly the bevel, so that the original curve is followed, and knives are not ground too thin. Years of manufacturing experience has proven that, by carefully observing the above instructions, the greatest life and best service will be obtained.

Better Results After First Grinding. Another point well to be remembered is the fact that the longer you can keep a knife on a machine without having to change and grind it, the better the cutting will be. That is in whetting, barring gaps and accidental breaks, a knife is in better shape after the first grinding for doing true work than when it was first put on. Then as long as you keep the edge in good shape, properly whetted, it will do good work.

Knives Burned By Grinding. There is no immediate indication of overheating when the temper of a knife is being drawn; it is only after the grinding wheel again passes over the knife, that the slightest blue mark will appear. This is all that is visible to the eye, but try the knife with a file and you will find it very soft. Take a hammer, strike the edge lightly and the edge will turn over completely; then if you strike harder, it will break out further back from the cutting edge. This indicates that only the cutting edge is overheated, and if it is carefully ground off, the knife will again be ready for use. This remedy, while known only to expert grinders, proves very successful; but it is far better and more economical to be careful when grinding and prevent the overheating of the cutting edge. "An ounce of prevention is worth a pound of cure."





FILES made to cut, not to rub or slide over the work, require an even, draw-filed blank; full, correctly shaped teeth cut on the proper angle—teeth that remove chips on each stroke and do not fill up. Quality steel, extreme hardness combined with toughness, produces the keen, edge-holding teeth, and the joy of feeling the file cut right into the hardened steel.

Hardened teeth against hardened steel.

That's where OHLEN-BISHOP

FILES

are the leaders.

THAT'S THE REAL TEST.

FILING CROSSCUT and CIRCULAR SAWS

There's real joy in the long, clean, easy strokes of the OHLEN-BISHOP FILE. You know what you can do with it; you can depend on it to help you turn out the best job whether you're an expert or a handy man around the house. Furthermore, these good qualities are lasting.

The Reasons

A T the Ohlen-Bishop Plant every facility for the production of fine Files, special methods of cutting and finishing, are provided.

Made by expert metallurgists and mechanics who have made a life study of their work and using only the highest grade of Steel, no detail of Quality manufacturing is omitted. Each file must be soundly tempered, teeth cut deep and sharp, inspected for most minute defects of workmanship or materials before it receives the O. K. of the Ohlen-Bishop Brand.

These are the reasons why Ohlen-Bishop Files and Rasps are so extensively used the world over.

We solicit your orders. Service is the watchword of our house. Service means prompt shipments and careful attention to your wants.

The Proper Manner to Order Files

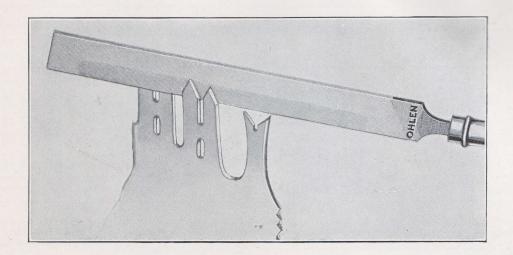
- First: The length, determined by measuring from the heel (or where the tang begins) to the point.
- **Second:** The shape, Flat, Mill, Round, Half Round, Taper, Square, etc., as listed on pages 78 and 79, which are considered standard styles and sufficient to meet any requirements.
- Third: The Cut by this is meant the kind or character, coarseness or fineness of teeth, which are designated as follows; as to character of teeth, Single Cut, which has one unbroken row of teeth or chisel cuts across its surface, parallel with each other, but on an oblique angle to the length of the file. This cut is used on all Mill Files, Taper Saw Files, etc. The Double Cut which has two rows of teeth or chisel cuts crossing each other, one row being finer than the other, Machinist's Files as Flat, Hand, Square, Round, Half Round are Double Cut. Rasp Cut Files have no parallel rows of teeth but separate teeth made by a single pointed tool or punch. The coarseness of cut is designated as follows: Bastard, Second Cut and Smooth. There are also files made coarser than Bastard, namely Rough and Coarse; also finer than Smooth, namely, Dead Smooth.



Look for the Ohlen Label

WE SELL NOT ONLY SAWS-BUT

Ohlen Special Cross Cut Files



Furnished in the following sizes:

Inch	Price Per Dozen
6	\$4.60
7	4.90
8	5.80
10	7.80

Have you ever used an Ohlen Special Cross-Cut File? If not you have missed that feeling of joy which every skilled mechanic experiences when he feels that his task is completed correctly and economically. These files, because they are uniform in width, give 15 or 20 percent more work than a mill file (the shape of which is tapered at the point) so commonly used for cross-cut filing.

Let us help you save money on your next order for cross-cut files by giving you a file which will stand up longer and turn out a better filed cross-cut saw.



Ohlen-Bishop Files and Rasps

LIST PRICE PER DOZEN

TAP	ERS	Slim	Extra			Double	Pit	Special	HAN	D SAW
Sgl. Cut	Dbl. Cut	Taper	Slim Taper	Regular	Slim	Ender	Saw	Ĥand Saw	Blunt	Blunt Slim
\$2.10		\$2.10								
2.10		2.10								
2.20	\$2.90	2.20	\$2.20	\$2.90						\$2.50
2.40	3.10	2.30	2.30	3.10			5.40		3.00	
	3.50	2.50	2.50	3.50			5.40	3.10	3.40	3.10
			2.90				6.10	3.80		
							6.10	4.50	4.30	3.80
							7.00		5.40	
						11	7.50		6.60	5.40
3.40	0.70	1.50	1.00		Ye and the					100
9 10		6.40								
				7.10		1.70				
	Sgl. Cut \$2.10 2.10 2.20 2.40 2.60 3.00 3.40 4.30 5.40	\$2.10 2.10 2.20 2.40 3.10 2.60 3.00 3.40 4.70 4.30 5.60 5.40 6.70	Sgl. Cut Dbl. Cut Taper \$2.10	Sgl. Cut Dbl. Cut Slim Taper Extra Slim Taper \$2.10 \$2.10 \$2.10 \$2.10 2.20 \$2.90 2.20 \$2.20 2.40 3.10 2.30 2.30 2.60 3.50 2.50 2.50 3.00 2.90 2.90 2.90 3.40 4.70 3.10 3.10 4.30 5.60 3.80 3.80 5.40 6.70 4.50 4.50 8.10 6.40	Sgl. Cut Dbl. Cut Slim Taper Slim Taper Slim Taper Regular	Sgl. Cut Dbl. Cut Slim Taper Extra Slim Taper Regular Slim Regular \$2.10 3.10 3.10 3.10 3.10 3.10 <td> Sgl. Cut Dbl. Cut Taper Slim Sl</td> <td> Sgl. Cut Dbl. Cut Taper Slim Sl</td> <td> Sgl. Cut Dbl. Cut Taper Slim Slim Slim Saw Saw</td> <td> Sigh Cut Dbh Cut Taper Slim Taper Special Hand Saw Slim Taper Slim Ta</td>	Sgl. Cut Dbl. Cut Taper Slim Sl	Sgl. Cut Dbl. Cut Taper Slim Sl	Sgl. Cut Dbl. Cut Taper Slim Slim Slim Saw Saw	Sigh Cut Dbh Cut Taper Slim Taper Special Hand Saw Slim Taper Slim Ta

	v	VARDIN	1G		KNIFE		D1	Ct	Cross	Cabinet	LEAD and WOO	FLOAT OD FILES
Inch	Bast.	2d Cut	Smooth	Bast.	2d Cut	Smooth	Planer Knife	Saw	Cut	Files	Flat	Hf. Rd.
4	\$4.00	\$4.80	\$5.40	\$5.40	\$6.10	\$6.40						
5	4.50	5.30	5.80	6.10	6.70	7.10						
6	4.90	5.90	6.40	6.90	7.50	7.90		\$5.40		\$8.10	\$4.80	\$7.00
8	6.40	7.50	8.20	8.50	9.10	9.50	\$6.40	6.40	\$7.50	10.10	6.30	8.50
10	8.70	10.10	11.00	10.10	11.50	12.30	8.60	8.70	9.10	13.70	8.60	10.70
12			11.00	13.70	15.20	16.10				18.70	11.80	14.10
14										24.80	16.00	18.50
16											21.50	24.70

Lunda		WOOD SPS		ROUND RASPS	CABI		SHOE	RASPS	HORSE	RASPS
Inch	Bast.	Smooth	Bast.	Smooth	2d Cut	Smooth	Flat	Hf. Rd.	Plain ½ File	Tanged
6 8 9	\$9.40	\$12.80	\$8.10 10.10	\$10.10 13.70	\$10.10 12.80	\$11.70 15.50	\$10.10 12.20	\$10.10 12.20		
10 12	12.80 17.50	17.50 23.20	13.70 18.70	18.70 24.80	17.50 22.80	20.70 26.80	13.70	13.70	\$12.80	\$16.80 19.60
13 14 15	23.20	30.80	24.80	32.90	29.60	33.90			17.80 20.90	23.10
16 18	30.80	40.90	32.90	43.60					24.40 32.90	32.20

The above list comprises all of the kinds, sizes, and cuts of files that will be regularly carried in stock. Anything differing from these files will be considered as special and will not be manufactured except in cases of urgent necessity; and when manufactured, price will be based strictly upon cost of material and cost of manufacture at time goods are made.



Ohlen-Bishop Files and Rasps

LIST PRICE PER DOZEN

		MILL		MILL	1 R. E.	MILL	2 R. E.	MILL	BLUNT	Square Blunt	Round
Inch	Bast.	2d Cut	Smooth	Bast.	2d Cut	Bast.	2d Cut	Bast.	2d Cut	Bast.	Bast.
4	\$3.00										
5	3.20										
6	3.50	\$4.00	\$4.50	\$3.90	\$4.50	\$4.40	\$5.00	\$3.90	\$4.60		
7	3.90	4.60	4.90	4.40	5.20	4.90		4.30	4.90		
8	4.30	4.90	5.40	4.80	5.50	5.40	6.10	4.90	5.80	\$7.40	\$5.60
9	4.90	5.80	6.30	5.50	6.50	6.10	7.30	**********			
10	5.60	6.40	7.00	6.30	7.20	7.00		6.70	7.80	10.20	7.50
12	7.50	8.60	9.40	8.40	9.70	9.40	10.80			13.90	10.70
14	10.70	12.20	13.10	12.00	,,,,					18.70	14.70
16	14.70	16.80	17.90							25.10	
18	20.20	10.00	17.70							32.80	

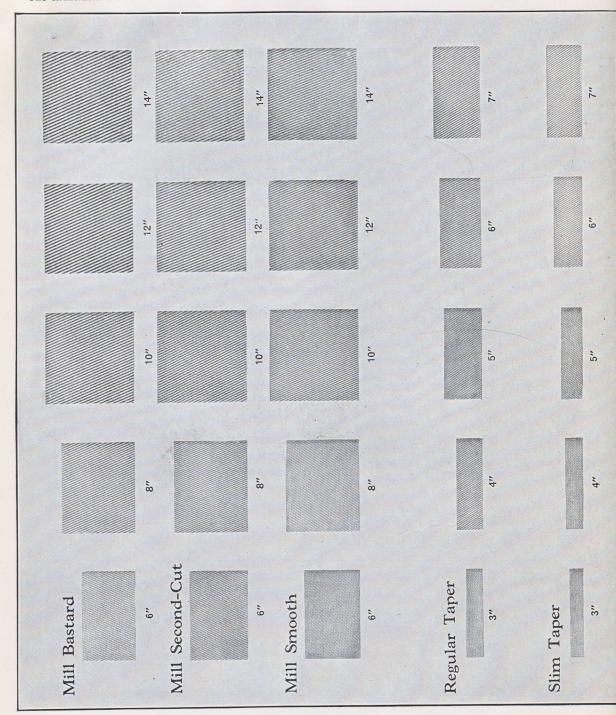
		FLAT			HAND			PILLAR		HAND FI	INISHING
Inch	Bast.	2d Cut	Smooth	Bast.	2d Cut	Smooth	Bast.	2d Cut	Smooth	2d Cut	Smooth
4	\$3.70	\$4.30	\$4.70	\$3.70	\$4.30	\$4.80					
5	3.90	4.60	4.90	3.90	4.70	5.30					
6	4.30	4.80	5.30	4.30	5.10	5.60	\$4.30	\$5.10	\$5.60		
7	4.80	5.50	6.10	4.90	5.80	6.30					
8	5.30	6.10	6.60	5.40	6.30	6.70	5.40	6.30	6.70		
9	6.30	7.20	7.90	6.70	7.80	8.30					
10	7.00	8.10	8.70	7.50	8.70	9.40	7.50	8.70	9.40		
12	9.70	11.00	12.10	10.70	12.30	13.50	10.70	12.30	13.50	\$15.20	\$16.20
14	13.30	15.30	16.70	15.00	17.00	18.20	15.00			20.60	21.70
16	17.80	20.10	22.30	20.10	22.80	24.20	20.10				
18	23.90	26.80	29.20	26.80	29.90	31.50					
20	31.50			35.10							

a colver	R	OUND		S	QUARE		HAI	LF ROU	ND	THRI	EE SQU.	ARE
Inch	Bast.	2d Cut	Smooth	Bast.	2d Cut	Smooth	Bast.	2d Cut	Smooth	Bast.	2d Cut	Smooth
4	\$3.00	\$3.50	\$3.90	\$3.80	\$4.60	\$4.90	\$4.80	\$5.60	\$6.10	\$4.80	\$5.60	\$6.10
5	3.20	3.80	4.10	4.10	4.80	5.30	5.40	6.10	6.40	5.40	6.10	6.40
6	3.50	4.00	4.50	4.60	5.10	5.50	6.10	6.70	7.10	6.10	6.70	7.10
7	3.90	4.60	4.90	5.10	5.80	6.30	7.00	7.70	8.20	7.00	7.70	8.20
8	4.30	4.90	5.40	5.50	6.30	7.00	7.50	8.30	8.90	7.50	8.30	8.90
9	4.90	5.80	6.30									
10	5.60	6.40	7.00	7.40	8.50	9.10	9.10	10.10	10.70	9.10	10.10	10.70
12	7.50	8.60	9.40	10.20	11.50	12.80	11.80	13.00	13.90	11.80	13.00	13.90
14	10.70	12.20	13.10	13.90	16.10	17.50	15.50	17.00	18.30	15.50	17.00	18.30
16	14.70	16.80	17.90	18.70	21.20	23.30	20.60	22.50	24.20	20.60	22.50	24.20
18	20.20	22.70	24.30	25.10	28.20	30.40	27.50	29.90	32.00	27.50	29.90	32.00
20	27.40			32.80								





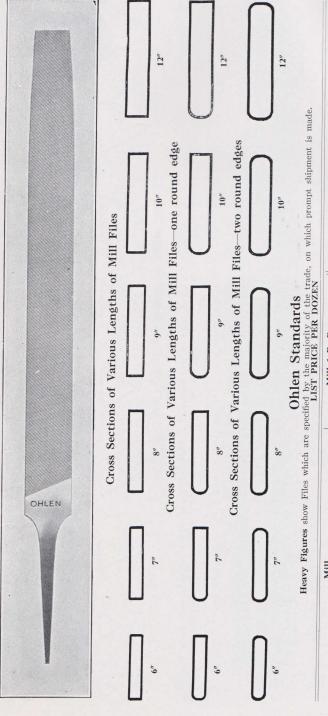
The Illustrations below show the different cuts of Teeth in the various lengths of Single Cut, Flat Surface Files





Mill Files are used principally for filing Mill Saws, Planer Knives and on similar work. They are tapered in shape, taper extending from a point about one-third of the distance from point back to the heel. Most mechanics prefer the Bastard Cut but in some cases Second Cut and Mill Smooth are desired.

Mill Bastard File



	Mill		Mill 1 R. E.	R. E.		Mill 2 R. E.		Mill	Will Ringt
Bast.	2d Cut	Smooth	Bact	1 2d Cut	don'	Deat	1000		Time of
			Dasc.	7n Car	THCH	bast.	7d Cut	Bast.	Zd C
\$3.00					4				
3.20	00 70				25				
3.90	00.44	34.50	\$3.90	\$4.50	9	\$4.40	\$5.00	\$3.90	84.6
4 30	00.1	4.90	4.40	5.20	7	4.90		.4.30	4.9
4.90	2.80	5.40	4.80	5.50	000	5.40	6.10	4.90	5.8
5.60	6.40	2.00	3.30	0.50	0,	6.10	7.30		
7.50	8.60	0.40	8.40	07.7	10	00.7	00 07	6.70	7.8
10.70	12.20	13.10	12.00	2.10	77	9.40	10.80		
14.70	16.80	17.90	200		17	***********	***************************************		
20.20		07:11			01		***********		
					18				

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000 00 1111

For Complete Prices on Files See Pages 78-79 See Discount Sheet

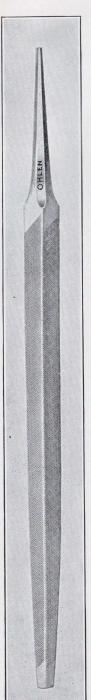
SATISFACTION SERVICE SAW AND



Inch

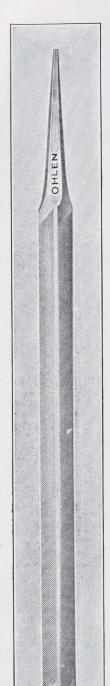
Taper Files

Taper Files used principally for filing Hand Saws and Band Saws. They are three cornered or triangular in shape and gradually tapered from point to heel.



Taper Saw Files are used for filing hand saws. Edges are cut with one row of teeth.

Taper Band Saw Files have rounded edges cut with two rows of teeth.



Bunt Band Saw Files are the same as taper saw files excepting shape as the end is blunt and the edges are rounded and cut with two parallel rows of teeth for filing band saws. Hand Saw Blunt Files are the same shape as blunt band saw files excepting that the edges are set and cut with one row of teeth.

< < < <

Taper Saw File Cross Sections of Various Lengths of Taper Files

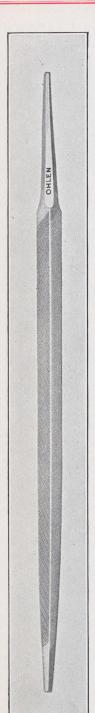
	Hond Com Dlunt	n Saw Diuit		\$2.60	3.00	3.40	4.30	5.40	09.9				
made.	Trans			\$2.90	3.10	3.50	4.70	5.60	02.9	0	07.6		int Sheet
prompt shipment is 1	_	Taper band bil		\$2.90	3.10	3.50	4.70	5.60	6.70		9.70	-	See Discount Sheet
DOZEN of the trade, on which		Inch	3	31/2	41%	37,2	51/2	700	00	6	10	12	
LIST PRICE PER DOZEN Heavy Figures show Files which are specified by the majority of the trade, on which prompt shipment is made.	Saw	Double Cut		90 68	3 10	3.50	4 70	5.60	6.70				Complete Prices on Files See Pages 78-79
Heavy Figures show Files wh	Taper Saw	Single Cut	\$2.10	2.10	2.20	2.60	3.00	3.40	5.40		8.10	12.50	
o o o		Inch	3	31/2	4.	4 rc	51/2	01	- 00	6	10	12	For



1 %

Slim Taper Files

Are three-cornered and principally used for filing hand saws: In order to prevent sharp angles in gullets these files are cut with one row of Teeth on the edges.



Slim Taper Band Saw Files are similar to slim taper files except edges are rounded and have two parallel rows of teeth for filing band saws. Blurt Slim Band Saw File. Same as slim taper band saw file with rounded edges, but the end is bluur. Double Ender Files are the same as slim taper files except that they are tapered from center to both ends. Used for filing hand saws. Cross Sections of Various Lengths of Extra Slim Taper Files

Cross Sections of Various Lengths of Extra Slim Taper Files

Extra Slim Taper Fifes are the same shape and cut as Slim Taper Files, but are narrower in width. Used for filing hand saws.

Ohlen Special Hand Saw File

OMLEN

Used for Ohlen Special Hand Saw File. These files are blunt and made from same stock as double extra slim taper files, otherwise same as extra slim taper files. LIST PRICE PER DOZEN

Heavy Figures show Files which are specified by the majority of the trade, on which prompt shipment is made.

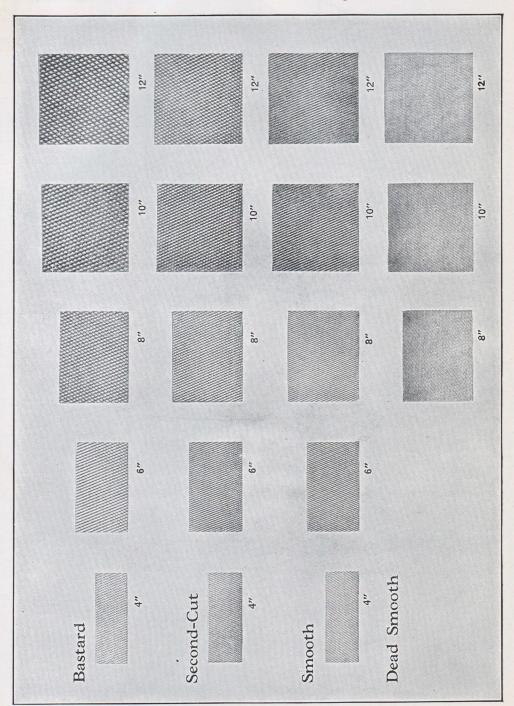
						. T C T.	C. T. T. I. C.
Inch	Slim Taper	Slim Taper Band	Blunt Slim Band	Inch	Double Ender	Double Ender Extra Slim Laper Special Hand Saw	Special Hand S
3	\$2.10			33			
,	01.00			211			
3/2	2.10			5/2			
4	2.20			4		\$2.20	
41/2	2.30			41/2		2.30	
ic	2.50		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	20		2.50	\$3.10
71.5	2 90			21%		2.90	3.80
2/9	3.10	\$3.90	\$3.90	. 9		3.10	4.50
7	3.80			7	\$3.50	3.80	***************************************
. 00	4.50	5.30	5.30	80	3.90	4.50	***************************************
6				6	4.40		
10	6.40			10	4.90		
12	0 50			12			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

For Complete Prices on Files See Pages 78-79

See Discount Sheet

SAWS OTTES SAWS FILES OTTES SAWS OTTES SAWS FILES SAWS FILES SAWS FILES MACHINE SOURCE SAWS FILES SAWS FILES SAWS FILES SAWS MAKENS SINCE 1852

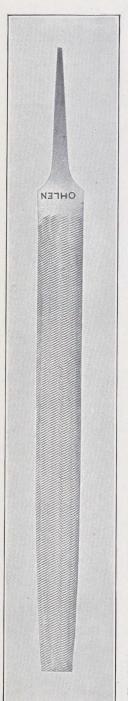
The illustrations below show the different cuts of Teeth in the various lengths of double cut, flat surfaced files.





Flat Files are tapered both in width and thickness and have open cut, widely spaced teeth. They are used principally on soft metals.

Flat Bastard File



Used mainly on flat surfaces because of their shape Hand Files are similar to flat files but are tapered in thickness with one uncut edge and are of uniform width.

	11"		10"	
les	10"	iles	6	
Cross Sections of Various Lengths of Flat Files	,,6	Cross Sections of Various Lengths of Hand Files		LIST PRICE PER DOZEN
tions of Various	8	ions of Various	"8	LIST PRICE PER DOZEN
Cross Sect	""	Cross Sect	9	
	"9		5″	
	4" 5"		4"	

	Flat					Hand	
Inch	Bast.	2d Cut	Smooth	Inch	Bast.	2d Cut	Smooth
	\$3.70	\$4.30	\$4.70	4	\$3.70	\$4.30	64 86
2	3.90	4.60	4.90	· v	3 90	4 70	5 3
	4.30	4.80	5.30	9	4.30	7.10	0.10
	4.80	5.50	6.10	7	4.90	5.80	2.9
	5.30	6.10	09.9	000	5.40	6.30	02.9
	6.30	7.20	7.90	6	6.70	7.80	200
	7.00	8.10	8.70	10	7.50	8.70	0.4
	9.70	11.00	12.10	12	10.70	12.30	13.5
	13.30	15.30	16.70	14	15.00	17.00	18.2
	17.80	20.10	22.30	16	20.10	22.80	24.2
	23.90	26.80	29.20	18	26.80	29.90	31.5
	31.50			20	35 10		

For Complete Prices on Files See Pages 78-79 See Discount Sheet



Pillar Files

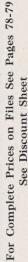
16" Are similar to, but narrower than, Hand Files. One edge is uncut. Used principally in machine shops where a narrow file is required. Cross Sections of Various Lengths of Pillar Files 14" Very thin with an extreme taper to point; uniform thickness. Warding File.

ОНГЕИ

Warding File

	10"	-
hs of Warding Files	**	LIST PRICE PER DOZEN
Cross Sections of Various Lengths of Warding Files	"9	LIST PRICE PER DOZEN
Cross Sect	5″	
	4"	

Pillar				Wa	Warding	
Bast.	2d Cut	Smooth	Inch	Bast.	2d Cut	Smooth
	-		4	\$4.00	\$4.80	\$5.40
			50	4.50	5.30	5.80
\$4.30	\$5.10	\$5.60	9	4.90	5.90	6.40
5 40	6.30	6.70	000	6.40	7.50	8.20
7.50	8.70	9.40	10	8.70	10.10	11.00
10.70	12.30	13.50	12			
15.00			14			
20.10			10			





Square Files

Are furnished either tapered or blunt shape. Used principally for enlarging rectangular holes.

Square Bastard File

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OHLEN

Cross Sections of Various Lengths of Square Files

16" 12" 10″ 8 **"9** 2"

Heavy Figures show Files which are specified by the majority of the trade, on which prompt shipment is made. LIST PRICE PER DOZEN Square

8

...9

44

Bastard

1,4

3"

Second-Cut

		Blunt		
Inch	Bast.	Bast.	2d Cut	Smooth
4	\$3.80		\$4.60	
20	4.10		4.80	
9	4.60		5.10	
7	5.10		5.80	
00	5.50	\$7.40	6.30	7.00
6				
10	7.40	10.20		9.10
12	10.20	13.90		12.8
14	13.90	18.70		17.5
16.	18.70	25.10	21.20	23.3
18	25.10	32.80		30.4
20	32.80			-

For Complete Prices on Files See Discount Sheet See Pages 78-79 *8 ...9

** ...9 4, 4 Smooth

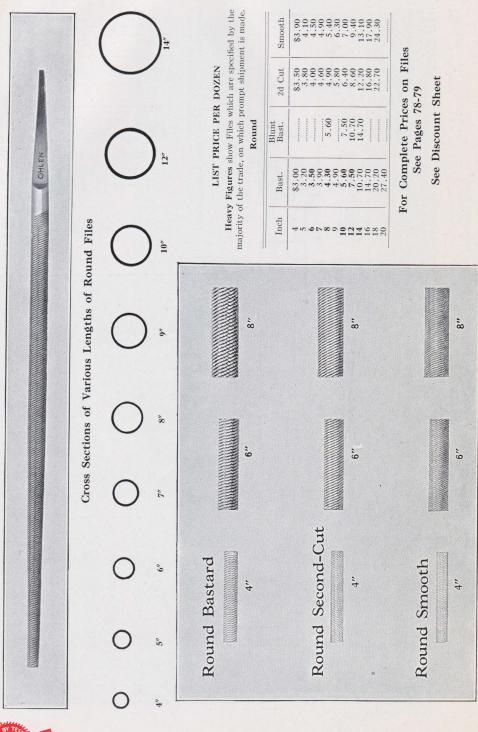
SATISFACTION SARVICE ANDAW



Round Files

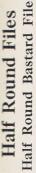
Also known as Rat-tail Files. These Files are tapered and used for enlarging Circular holes.

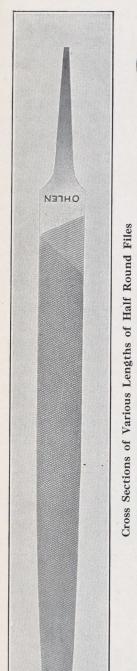
Round Bastard File

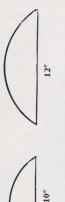




SINCE MASTER MAKERS 1852 SAW







The difference in the Cut of different lengths of Half Round Files is illustrated on this page. Half Round Files are double cut and are furnished either bastard, second cut or smooth in coarseness.

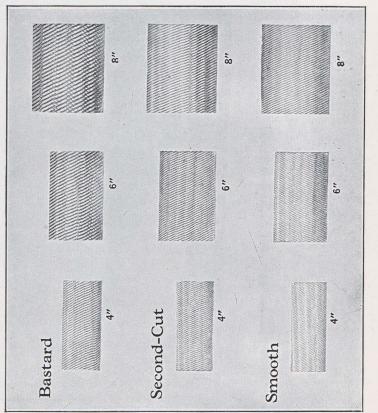
LIST PRICE PER DOZEN

Heavy Figures show Files which are specified by the majority of the trade, on which prompt shipment is made.

Half Round

Smooth	\$6.10	6.40	8 20	8.90	10.70	13.90	18.30	24.20	20 00
2d Cut	\$5.60	6.10	0.70	8.30	10.10	13.00	17.00	22.50	00 00
Bastard	\$4.80	5.40	7.00	7.50	9.10	11.80	15.50	20.60	27 50
Inch	4	5	0 1	000	0 01	12	14	16	18

For Complete Prices on Files See Pages 78-79



Knife Files

They are tapered in width and thickness The back is uncut and the thin edge Single cut. Knife Files are double cut on the flat sides. The be and end of File is rounded similar to a pocket knife blade.

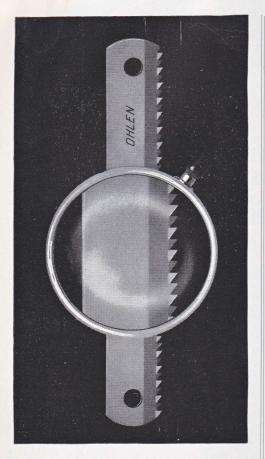
A file a Tang and used for sharpening planer knives Planer Knife Files are blunt and same dimensions as made especially for filing American Tooth Cross Cut Planer Knife File. A double-end file without ends are single cut both ways towards the center. Hook Tooth Files are used for sharpening in-Hook Tooth (Inserted Tooth) serted tooth saws and hook tooth cross cut saws. \$8.30 10.10 without removing them from machine head. Great American Cross Cut Files. Cross Cut (Gt. American) \$7.50 9.10 Cross Cut Files Heavy Figures show Files which are specified by the majority of the trade, on which prompt shipment is made. Cross Sections of the Various Lengths of Knife Files \$4.60 4.90 5.80 7.80 Special End Section of Mill Files. Planer Knife File 10, Inch End Section of Hook Tooth File End Section of Gt. American File Cabinet \$8.10 13.70 18.70 24.80 10.10 round file. Naturally the teeth are larger and more Pit Saw Files are semi circular and blunt in it is slightly wider and thinner than regular halfshape. Filing pit and frame saws is their principle Cant Saw Files are used for filing "M" Tooth Cabinet Files are double-cut and tapered. Although the same shape, widely spaced because of the softer nature of wood. Planer Knife 8.60 \$6.40 Cross Cut Saws and Wood Saw Blades. \$5.40 6.40 Cant Used for work in wood. 5.40 6.10 6.10 7.50 \$4.80 Pit use. End Section of Cant Saw File End Section of Pit Saw File End Section of Cabinet File 44220180014 Inch

For Complete Prices on Files See Pages 78-79



Ohlen-Bishop Hack Saws

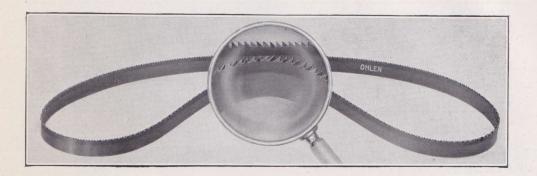
It Pays to Buy Ohlen-BishopHackSawswith Teeth Milled at the Proper Angle.



		,	1			
	Thin Sheet Metals and Thin Tubing	32 32 32 32 32				
	Drill Rod, Medium Sheet, Metals and Tubing	24 24 24 24 24				
	Light-Angles, Channels, Tee Iron, Ornamental Iron	24 24 24 24	24 24 24			
e Cut	Steel Pipe, Iron Pipe, Brass Pipe, Copper Pipe, Conduit	24 24 24 24	24 24 24			
iterial to b	Heavy-Angles Channels, Tee Iron, High Speed Steel	81 88 81 88 81	18 18 18	14	114 114 144 144	
th For Ma	Tool Steel, Hard Metals, Light Structural	81 81 88 88 81 88	144	14	444444	
No. of Teeth For Material to be Cut	Rails, Machinery Steel, Soft Steel, Annealed Tool Structural	41 14 14 14 14	14	100	000000000000000000000000000000000000000	heet
	Cast Iron, Solid Babbitt, Brass, Copper, Bronze, Aluminum	41111	12 12 12	10	00000000	See Discount Sheet
	Per Per	4420	91/2 113/4 13	18 2014	23 28 33 44 44 44 44 44 44 44 44 44 44 44 44	See D
	List Price	\$8.00 9.00 10.00 12.00	16.80 21.36 24.36	28.92	37.92 43.56 51.72 54.36 50.88 59.52 62.04	
The	bo	32 32 32 32 32		-		
	No.	24 24 24 24	24			
	lard'	81888	188	41	4444	
	Standard'No. of Teeth Per Inch	4444	444	100	222222	
		23 23 23 23 23	22 21 21 21	18	888889 919 919 919	
	Thickness Gauge	.025 .025 .025 .025	.032	.049	.049 .049 .049 .049 .065 .065	
	Width	74747474	100/4/4	W/W/ /4/4		
	Length	8 10 12	122	12	12 14 17 18 18 17 17 18	
		Hard Edge Flexible Back Hand Blades	All Hard Power Blades	All Hard Medium Machine Blades	All Hard Heavy Duty Machine Blades	



Hard Edge Flexible Back Metal Bands



Hard Edge Flexible Back Metal Bands furnished in the following sizes:-

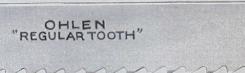
Size	Price per Foot	Brazing per Saw
½ x 025	.07	.20
5/8 x 032	.08	.25
3/4 x 032	.09	.30
1 x 036	.11	.30

Due to special equipment we are in a position to furnish Hard Edge Flexible Back Metal Bands cut to length for any standard machine. We furnish a sufficient lap free of charge so that the saw can be brazed. This feature is finding many contented users who claim that the saving in steel and time required to cut a saw from a coil is a big factor in reducing their expense.

In addition to this all our Hard Edge Flexible Back Metal Bands are furnished with a milled tooth similar to those in a hack saw. Ordinary blades are milled one at a time and consequently are burred. Ours are milled 40 at a time and due to this fact all are without burrs excepting the last one. This has a burr similar to ordinary saws but instead of being sold this last saw is scrapped.



Ohlen-Bishop All Hard Metal Bands



For Cutting	Saw Speed Per Minute Recommended
Aluminum	1,000 Feet
Angles, Light	4,000 "
Angles, Light	4,000 "
Asbestos	
Babbitt	
Bakelite	
Brass Sprews and Gates, Soft	2,000 "
Brass Sprews and Gates, Soft. Bronze Sprews and Gates, Soft	4,000 "
Channels, Light	4,000 "
Copper	2,000 "
Fibers	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4.000
Metal Wolding, 19 Ga. and Timmer	4,000 "
Mica	4.000 "
Metal Molding, 19 Ga. and Thinner	4.000 "
Tubing, Light Steel and Brass	2,000 "
White Metals	4.000 "
Wind Shield Frames	4,000

Widths	Thickness		Teeth I	er Inch		Price Per Foot	Price Per Weld
14 inch 3/8 " 1/2 " 5/8 " 5/8 " 3/4 " 7/8 " 11/8 " 11/4 " 11/4 " 11/4 " 11/4 " 11/4 " 11/4 "	.032 or 21 Ga032 " 21 " .032 " 21 " .035 " 20 " .042 " 19 " .035 " 20 " .032 " 21 " .035 " 20 " .032 " 21 " .035 " 20 " .035 " 20 " .035 " 20 " .035 " 20 " .035 " 20 " .035 " 20 " .035 " 20 " .035 " 20 " .035 " 20 "	8 7 6 5 4 3 3 2 1 2 1 2 2 2 2 2	9 8 7 6 5 4 4 4 4 3 ¹ / ₂ 3 3 2 ¹ / ₂ 2 ¹ / ₂ 2 ¹ / ₂	10 9 8 7 6 5 5 5 4 3 1 2 3 3 2 1 2	6 5 4	\$0.08 .09 .10 .11 .12 .13 .12 .13 .14 .15 .16 .18	\$0.20 .20 .25 .25 .25 .30 .30 .30 .30 .40 .45

Can be successfully operated as fast as 12,000 feet per minute. SHAPE of TEETH should be specified—either "REGULAR" as above, or "FORMED".



Ohlen-Bishop All Hard Metal Bands



Right and Left Set	Deep Circular Gullets Can be Re-Filed
Set and Sharpened	and Re-Set Saw Speed Per
For Cutting	Minute Recommended
Angles, Medium Sizes	4,000 Ft. to 12,000 Ft.
Buckram, For Auto Tops, etc.	4 ()()() 12.000
Channels, Medium Sizes.	4.000
Metal Molding, 18 Ga. and Heavier	4 000 " " 12.000 "
Dia Light Steel Iron and Brace	4.000 " "12,000
Steel Sheets, Soft, 18 Ga. and Heavier	4,000 " " 12,000 "
Wind Shield Frames	4 000 " " 12 000 "

Furnished Either in Coils or Cut to Length and Welded "Formed" Teeth Supplied in Following Sizes Only

Width	Thickness		Teeth P	er Inch		Price Per Set	Price Per Weld
3/8 inch 1/2 " 5/8 " 5/8 " 5/8 " 3/4 " 3/4 " 3/4 "	.032 or 21 Ga. .032 " 21 " .032 " 21 " .035 " 20 " .042 " 19 " .032 " 21 " .035 " 20 " .035 " 20 " .032 " 21 "	7 6 5 4 3 3 ¹ / ₂ 3 2 ¹ / ₂	8 7 6 5 4 4 4 3 ¹ / ₂	9 8 7 6 5 5 5	5	\$0.09 .10 .11 .12 .13 .12 .13	\$0.20 .20 .25 .25 .25 .30 .30 .30

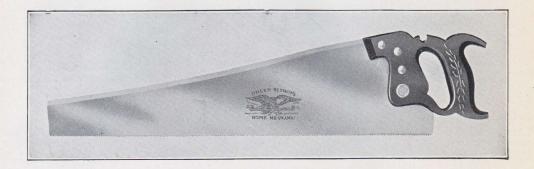
Welded Saws measuring 6 inches or more over the even foot will be charged for the entire foot; less than 6 inches over the even foot will not be charged for:

EXAMPLE: 1 saw 5/8 in. wide, 15 ft. 8 in. long equals 16 ft. at 11c (\$1.76) plus 25c for welding; total \$2.01. For FAST SPEEDS, COURSE TEETH are recommended.

SHAPE of TEETH should be specified, either "FORMED" as above or "REGULAR".



Ohlen-Bishop "Home Mechanic" Hand Saw



A beautifully designed, hand finished, high quality saw bearing the OHLEN-BISHOP guarantee for unexcelled toughness and durability.

This saw is made of a high quality alloy steel, with a highly polished blade and carefully filed teeth.

Accurate grinding, uniform cutting edge and an attractive finish with a hand rubbed beech handle, fitted to the blade with four nickel-plated screws especially qualifies this saw for general use around the shop or home.

Made in one length and two points only.

24" long, 7 or 8 points to the inch......\$2.00

Don't Fail to Ask Your Dealer for an Ohlen-Bishop "Home Mechanic" Hand Saw



MASTER SAW MAKERS SINCE 1852

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